

**Bioassessment of Streams Along the Mackenzie
River Valley, Canada, Using the Reference Condition
Approach: Biological, Habitat, Landscape and
Climate Data**

L.L. Rempel and G.J. Gill¹

Fisheries and Oceans Canada
Central and Arctic Region
Freshwater Institute
Winnipeg, MB
R3T 2N6

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BIOASSESSMENT OF STREAMS ALONG THE MACKENZIE
RIVER VALLEY, CANADA, USING THE REFERENCE CONDITION APPROACH:
BIOLOGICAL, HABITAT, LANDSCAPE AND, CLIMATE DATA

by

L.L. Rempel and G.J. Gill¹

Fisheries and Oceans Canada
Central and Arctic Region
Freshwater Institute
Winnipeg, MB
R3T 2N6

¹ North/South Consultants Inc., 83 Scurfield Blvd, Winnipeg, MB, R3Y 1G4

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ABSTRACT

Rempel, L.L. and G.J. Gill. 2011. Bioassessment of streams along the Mackenzie River Valley, Canada, using the Reference Condition Approach: biological, habitat, landscape, and climate data. Can. Data Rep. Fish. Aquat. Sci. 1236: viii + 247 p.

DFO conducted biological and habitat sampling between 2005 and 2007 at 102 streams along the Mackenzie River Valley in the vicinity of the proposed Mackenzie Gas Pipeline (MGP). The purpose of the sampling program was to develop a bioassessment tool using the Reference Condition Approach (RCA) for environmental effects assessment of the MGP. Sampling sites were classified as either reference (94 sites) or test (8 sites) sites based on the site's history of disturbance. Reference sites provided a lineal sampling density along the MGP of 1 site per 12 km. Field data collection included habitat measurements, water chemistry and *in situ* water quality measurements, and benthic macroinvertebrate sampling using a kicknet (75 sites) or Ponar grab (27 sites). Additional landscape and climatic data were obtained from remotely-sensed sources. A total of 235,828 invertebrates was collected representing 54 distinct taxonomic families. Insects dominated the invertebrate community in abundance (83%), with non-insect taxa comprising 17% of the total. Diptera (91% Chironomidae) dominated the insect community and Ephemeroptera, Plecoptera, and Trichoptera together comprised 40% of the insect community and 33% of all invertebrates. There was substantial variability in physical habitat conditions among the 102 sampling sites that spanned a 1,200-km distance from the outer Mackenzie Delta to northern Alberta.

Key Words: Reference Condition Approach, Northwest Territories, Mackenzie Gas Pipeline, Mackenzie River, benthic macroinvertebrates, monitoring, assessment.

RÉSUMÉ

Rempel, L.L. et G.J. Gill. 2011. Évaluation biologique des cours d'eau dans la vallée du Mackenzie au Canada, au moyen de l'approche des conditions de référence : données biologiques et données de l'habitat, du paysage et du climat. Rapport statistique canadien des sciences halieutiques et aquatiques, 1236 : viii + 247 p.

Pêches et Océans Canada a recueilli des échantillons biologiques et des échantillons d'habitat entre 2005 et 2007 dans 102 cours d'eau de la vallée du fleuve Mackenzie, au voisinage du trajet proposé pour le gazoduc du Mackenzie. Le programme d'échantillonnage avait pour objet d'élaborer un outil d'évaluation biologique en adoptant l'approche des conditions de référence (ACR) pour évaluer les effets environnementaux du gazoduc. Les sites d'échantillonnage ont été classés comme sites de référence (94 sites) ou d'essai (8 sites), d'après l'historique des perturbations qu'ils avaient subies. Les sites de référence ont donné une densité d'échantillonnage linéaire le long du trajet du gazoduc de 1 site par 12 km. Sur le terrain, nous avons recueilli des données sur l'habitat, la chimie de l'eau et la qualité de l'eau *in situ*. Nous avons aussi échantillonné les macroinvertébrés benthiques à l'aide d'un filet troubleau (75 sites) ou d'une benne Ponar (27 sites). Nous avons obtenu d'autres données sur le paysage et le climat par télédétection. Au total, nous avons recueilli 235 828 invertébrés, de 54 familles taxonomiques. Les insectes dominaient la communauté des invertébrés par l'abondance (83 %), les taxons autres que d'insectes constituant 17 % du total. Les diptères (des chironomidés à 91 %) dominaient la communauté des insectes, constituée à 40 % d'éphéméroptères, de plécoptères et de trichoptères (33% du total des invertébrés). Nous avons constaté une variation considérable des conditions physiques d'habitat parmi les 102 sites d'échantillonnage qui s'étendaient sur une distance de 1 200 km, depuis l'extrémité du delta du Mackenzie jusqu'au nord de l'Alberta.

Mots clés : approche des conditions de référence, Territoires du Nord-Ouest, gazoduc du Mackenzie, fleuve Mackenzie, macroinvertébrés benthiques, surveillance, évaluation.

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INTRODUCTION

A consortium of companies has proposed construction and operation of a 1,220-km pipeline system along the Mackenzie River Valley, referred to as the Mackenzie Gas Project (MGP) (<http://www.mackenziegasproject.com/theProject/index.html>). It will link northern natural gas-producing wells to an existing pipeline system in Alberta for delivery to southern markets. The pipeline will cross four aboriginal regions in Canada's Northwest Territories (NWT): the Inuvialuit Settlement Region, the Gwich'in Settlement Area, the Sahtu Settlement Area and the Dehcho Territory (Figure 1). A short segment will be in north-western Alberta near the NWT border. In total, as much as 1.2 billion cubic feet per day of natural gas would move through the pipeline. If the project proceeds, construction will be completed over four years. Most work will occur during two consecutive winters, while some facility construction may be year-round. The pipeline is expected to operate for 25 years.

As part of the project definition phase, Fisheries and Oceans Canada (DFO) conducted a regulatory and technical project review. DFO has the responsibility to ensure compliance with the Fisheries Act in the Northwest Territories and Alberta, and therefore will have a regulatory and enforcement role throughout the life of the project should it proceed. Habitat biologists will be responsible for regulatory permitting, compliance and environmental monitoring, and both DFO officers and habitat biologists will share responsibility for inspections and enforcement. DFO scientists provided technical expertise to support the early project review and carried out research programs in both freshwater and marine environments to collect baseline data and fill information gaps. Moreover, DFO scientists have assisted with the development of large-scale monitoring programs that may be required should the project proceed.

For freshwater monitoring of potentially disturbed watersheds over large spatial scales, there are two widely used approaches: the Index of Biotic Integrity (IBI) (Whittier et al. 2007) and the Reference Condition Approach (RCA) (Bailey et al. 2004). With both methods, site assessment is based on comparing some measure of biological condition at test sites to the condition of a widespread group of physically similar sites known to be in reference condition. A deviation in biological condition between the test site and the reference condition is indicative of possible disturbance and usually a precursor to additional assessment efforts to confirm this hypothesis and determine the probable cause. Both approaches most commonly use aquatic macroinvertebrates as a biological indicator of site condition, but they may also use fish (IBI, Karr 1981; RCA, Bailey et al. 2006).

DFO Science led a research program from 2005 to 2007 to fill baseline data gaps and evaluate the Reference Condition Approach (RCA) for environmental effects assessment of oil and gas development on freshwater streams in the Mackenzie River Valley (Rempel et al. 2008). The starting point of the RCA program was the biophysical characterization of representative and undisturbed reference sites over the full range of environmental conditions in the project area. A predictive model was then built using multivariate statistical tools to relate the environmental characteristics of these reference sites to the biota, and finally predict the biota that would be found at a test site if it were in reference condition. DFO chose aquatic macroinvertebrates rather than fish to be an indicator of fish habitat conditions because invertebrates are easy to sample and are relatively stationary, so the species composition at each site should reflect local habitat conditions. In this way, the macroinvertebrate community was a surrogate indicator of fish habitat conditions.

This report presents RCA field and laboratory data collected between 2005 and 2007 from streams of the Mackenzie River Valley between the Delta and northern Alberta. Landscape data from several publically accessible databases, as well as climate data from Environment Canada meteorological stations are also presented; these data were included in the development of the RCA model (Rempel et al. 2008).

MATERIALS AND METHODS

STUDY AREA

The Mackenzie River is the largest north-flowing river in North America and the largest river in Canada, draining one fifth of Canada's land mass (1.8 million km²). Mean annual flow is approximately 10,000 m³/s (Rosenberg and Barton 1986). The Mackenzie River system includes seven major rivers (Peace, Athabasca, Slave, Liard, Great Bear, Peel, Mackenzie mainstem), three large lakes (Great Bear, Great Slave, Athabasca) and three large deltas (Peace-Athabasca, Slave, Mackenzie). The Mackenzie River empties into the Beaufort Sea through the Mackenzie Delta.

The study area encompasses the mainstem and tributary streams to the Mackenzie River, extending from the outer Mackenzie Delta at latitude 69.37077°N south to mixed boreal forests of northern Alberta at latitude 59.50115°N (Figure 1). All sampling sites are proximal to the mainstem Mackenzie River and the proposed MGP corridor, within a longitudinal range of 119.93666°W to 134.92788°W. The total lineal distance of the study area is approximately 1,200 km.

The study area spans two Canadian ecozones: the Southern Arctic that includes sites in the outer Delta, and the Taiga Plains that encompasses all remaining sites to the south. The outer Mackenzie Delta is within the Tuktoyaktuk Coastal Plain Ecoregion of the Southern Arctic Ecozone (<http://www.ec.gc.ca/soer-ree/English/Framework/Nardesc/TOC.cfm>). Influenced strongly by the Beaufort Sea, mean annual temperature is -11.5°C, with a summer mean of 4.5°C and a winter mean of -26.5°C. Annual precipitation is 125-200 mm. The area has a continuous cover of shrubby tundra vegetation consisting of dwarf birch, willow, northern Labrador tea, *Dryas* spp., and sedge tussocks. Distinctive delta landforms are prominent, including wetlands, deltaic distributary channels, and estuarine deposits. Wetlands cover up to 50% of the area. The region is underlain by continuous permafrost with high ice content. Fish species found in the outer Mackenzie Delta are generally able to exploit the available freshwater, marine and brackish environments. These include Arctic Lamprey, Lake Cisco, Arctic Cisco, Least Cisco, Lake Whitefish, Round Whitefish, Arctic Char, Inconnu, Pond Smelt, Burbot, Trout-perch, and Spoonhead Sculpin (Sawatzky et al. 2007). Considerable hydrocarbon exploration has occurred in the ecoregion, including the three gas fields of the MGP.

The Taiga Plains Ecozone is dominated by the Mackenzie River and its tributaries (<http://www.ec.gc.ca/soer-ree/English/Framework/Nardesc/TOC.cfm>). It is characterized by short, cool summers and long, cold winters. Mean annual temperature ranges between -10°C in drainages near treeline to -1°C in northern Alberta. From north to south, mean summer and winter temperatures range from 6.5°C to 14°C and -26°C to -15°C, respectively. Snow and ice persist for six to eight months of the year and annual precipitation (200-500 mm) is higher than in the Southern Arctic Ecozone. Sparse black spruce forest is dominant in the north and mixed white and black spruce forest dominates in the

south. Lodgepole pine, tamarack, white birch, trembling aspen, and balsam poplar are also common in the south. Shrubs include dwarf birch, Labrador tea, and willow.

The Taiga Plains are underlain by limestone, shale and sandstone. Undulating and hummocky morainal and lacustrine deposits are present and alluvial deposits are common along major tributaries to the Mackenzie River. The ecozone features a variety of stream types including deltaic low-gradient streams with a chute-pond morphology, steeper gradient streams along the flanks of the Norman Range with mixed cobble-gravel beds and a riffle-pool morphology, and finally meandering gravel-bed streams in the undulating terrain of the Mackenzie River Plain and Hay River Lowland ecoregions. A large portion of the ecozone is underlain by permafrost, which perches the water table and creates a landscape that is seasonally waterlogged over large areas; low-lying wetlands cover 25-50% of the zone. Common fish species include Arctic Lamprey, Lake Trout, Lake and Mountain Whitefish, Arctic Cisco, Longnose Sucker, Arctic Grayling, Dolly Varden, Burbot, Walleye, and Northern Pike. This is a subset of the 53 fish species documented in the lower Mackenzie River system (Bodaly et al. 1989).

SAMPLE SITE SELECTION

DFO conducted biological and habitat sampling between 2005 and 2007 at 102 streams along the Mackenzie River valley in the vicinity of the proposed MGP (Figure 1 to Figure 4; appendices A1-1 to A1-3). Sites were classified into the following three categories:

- **Ref-Pipe (62 sites):** the site is presently undisturbed but is expected to be disturbed during pipeline construction (i.e., located at or downstream of a planned crossing),
- **Ref-Future (32 sites):** the site is presently undisturbed and is expected to remain unaffected by pipeline construction, and
- **Test (8 sites):** physical disturbance has occurred at the site within the past 20 years.

The majority of sites are classified as 'Reference' (Ref-Pipe and Ref-Future) and are, by definition, pristine or undisturbed for at least 20 years. Some reference sites occur at proposed pipeline crossings and will be disturbed during construction (Ref-Pipe), whereas others are situated upstream of proposed construction activities and should remain undisturbed into the future (Ref-Future). Eight sites are classified as 'Test' sites because they have been disturbed to varying degrees in the past 20 years (e.g., bridge construction, right-of-way clearing, bank armouring, hydrocarbon spill) and their current ecological condition is unknown. Test sites are important for RCA model testing.

Opportunistic sampling of the first 24 streams occurred in late August / early September 2005 when DFO staff accompanied Indian and Northern Affairs Canada (INAC) on a water sampling trip (Appendix 1-1). Subsequently, a list of 200 candidate streams for future sampling was compiled during a July 2006 RCA workshop based on the local knowledge of participants representing Environment Canada, INAC, and DFO. Ongoing refinements and additions to this site list were made based on consultation with First Nations groups. The basis for prioritizing candidate sites for sampling was First Nations interests as well as achieving good spatial coverage over the entire pipeline route.

A total of 36 sites (34 reference sites and 2 test sites) were sampled in early September 2006 (Appendix 1-2). Up to 50 sites were scheduled for sampling but a safe helicopter landing site could not be found

for many sites south of treeline, particularly in the Dehcho Territory. At a randomly selected 4 of the 36 sites in 2006 (one test site and three reference sites), triplicate macroinvertebrate samples were collected for Quality Assurance / Quality Control (QA/QC) purposes as well as for testing model assessment precision. The net result was 44 macroinvertebrate samples collected in 2006.

In 2007, a total of 42 sites (37 reference sites and 5 test sites) were sampled in early September (Appendix 1-3). At 4 of the 42 sites (one test site and three reference sites randomly selected), triplicate macroinvertebrate samples were collected for Quality Assurance / Quality Control (QA/QC) purposes and for testing model assessment precision. The net result was 50 macroinvertebrate samples collected in 2007.

Samples from all reference sites provide a lineal sampling density along the MGP of 1 site per 12 km and represent 57% of all non-ephemeral streams along the MGP route (94 reference sites among 163 non-vegetated streams intersected by the MGP). The location of sites, in order from north to south, is shown in Figure 2 (Inuvialuit Settlement Region and Gwich'in Settlement Area), Figure 3 (Sahtu Settlement Area), and Figure 4 (Dehcho Territory and northern Alberta).

FIELD SAMPLING

Field sampling was carried out in early September of each year, which is the standard for RCA sampling in Canada mainly because the low-flow conditions are safe for wading. Most benthic invertebrate taxa are also abundant as larvae at that time. In each year, one crew of 3-4 people completed all sampling. Dr. Laura Rempel (DFO), who is certified in CABIN methods, personally trained all crew members and participated in the 2005 and 2006 sampling.

Field methods followed CABIN protocols described by Sylvestre (2006) and Sylvestre et al. (2005). Briefly, a visual assessment was completed upon arrival at a potential site to determine its suitability for sampling. Preference was given to wadeable sites; however, some deep streams and large rivers were sampled with measurements and samples confined to the river margin (referred to as side-shot sampling). Where available, riffle habitat was targeted for biological and water sampling; other habitats with flow (e.g., run) were sampled when riffle was unavailable. This was often the case in the Inuvialuit Settlement Region where ponded streams were common and slow-flowing or non-flowing habitats were proportionately dominant.

At each site, the survey reach was defined according to CABIN protocols as six times the bankfull width to ensure a representative length of stream was assessed. All samples and measurements were collected within the survey reach. In situ water quality measurements and water samples for chemical analysis were collected first before anyone entered the stream to avoid sample contamination caused by disturbance of the substrate. Water quality measurements were made using a hand-held Hydrolab Series 5 Minisonde and water samples were collected in bottles according to protocols of the analytical lab. One crew member then collected the macroinvertebrate sample by kicknet or Ponar. A travelling 400- μ m mesh kicknet was used to sample invertebrates from wadeable, gravel-bed streams (3-min sample duration). However, unwadeable soft-bottom streams, mostly located in the Mackenzie delta, were sampled using a petite Ponar sampler having a grab area of 0.026m² and a grab depth of 10 cm. The Ponar was operated by hand from the stream bank.

All crew members worked together to record observations and complete instream habitat measurements, which were recorded on-site to the CABIN Stream Field Sheet (Appendix 2). The sampling time at each site was approximately 1 hour. Depending on travel time between sites, approximately 5 sites were sampled per day. Field-derived variables and methods of collection are summarized in Table 1.

INVERTEBRATE LABORATORY PROCEDURES

Following CABIN laboratory protocols of Sylvestre (2006) and Sylvestre et al. (2005), preserved invertebrate samples were first washed through a 400- μ m sieve and hand-picked to remove large debris such as twigs and stones. The washed sample was then split into 16 cells of equal volume using a plankton splitter and cells were randomly selected for sorting and enumeration until 300 animals were counted. Entire cells were sorted even when the 300 count was reached part way through and the entire sample was sorted if less than 300 animals were found.

All animals were identified to the lowest reliable taxonomic level, usually genus, using keys from Edmondson (1959), Merritt and Cummins (1996), and Pennak (1978). Total sample count was calculated as the subsample count multiplied by the fraction of sample enumerated.

The sorting efficiency of invertebrate samples was evaluated each year by randomly selecting 10% of all samples for re-sorting. The target for acceptable sorting was >90% of the sample must be enumerated on the first sort. If a >90% efficiency was attained, the animals found on the second sorting were not included in the sample count. If efficiency was <90%, resorting of all samples by the lab technician occurred. All tests showed >90% efficiency on the first sort.

LANDSCAPE AND CLIMATE DATA

Landscape data for each sample site were retrieved from publically accessible databases using ArcGIS 9.1 and ArcHydro. For gravel-bed streams sampled by kicknet, the upstream catchment was delineated using 1:50,000 digital elevation models (DEMs) based on data from Natural Resources Canada (2000, <http://www.geobase.ca/geobase/en/data/cded/download.html>) and Geobase Secretariat (2007, <http://www.geobase.ca/geobase/en/data/nhn/index.html>). Those catchments were then analysed for several quantitative attributes. Upstream catchments of soft-bottom streams sampled by Ponar were not delineated because of the low surrounding relief of some sites. For all sites, soil and drainage data were obtained from the Soil Landscapes of Canada database (<http://sis.agr.gc.ca/cansis/nsdb/slc/intro.html>). Geological Survey of Canada geology data (Wheeler et al. 1997) were obtained at http://gsc.nrcan.gc.ca/map/1860a/db_e.php. Permafrost data (Brown et al. 1998) were obtained from http://nsidc.org/data/docs/fqdc/qgd318_map_circumarctic/index.html.

Climate data were included in the Mackenzie RCA study for consistency with the Yukon RCA model, which was developed principally to assess streams affected by placer mining (<http://www.yukonplacersetariat.ca/>). Climate data were obtained from Environment Canada (http://www.climate.weatheroffice.ec.gc.ca/Welcome_e.html). The period of record was limited to the past 15 years to avoid the possible confounding effects of climate change. Because site-specific daily climate data are not available, monthly temperature and precipitation statistics for each site were interpolated from the closest Environment Canada weather station with similar physiography (i.e.,

elevation, terrain, vegetation). Climate variables of interest were monthly average, minimum and maximum temperature as well as monthly total precipitation.

Several sample sites often shared identical temperature and precipitation data because they were proximal to each other and there are relatively few active weather stations in the Northwest Territories.

For cases of missing monthly temperature or precipitation data, values from the second most similar station were used when possible. This applied to six sites with missing temperature data (Table 9) and 11 sites with missing precipitation data (Table 10). Because the precipitation data record has many missing monthly values, various extrapolation techniques were necessary (see footnotes in Table 10).

For example, no single station was considered an adequate second-best match for 5 sites and so the average from three generally similar stations (Fort Simpson, Lindburg and Fort Liard) was used. The Trail Valley station lacked precipitation data for June and August, affecting seven sites, and these data were extrapolated from the next most similar station (Tuktoyuktuk) based on the relation between Tuktoyuktuk and Trail Valley values for August and October. Finally, missing precipitation data for October through April at the Bistcho Lake station (affecting two sites) were taken from the next best Fort Liard station.

RESULTS

All field (i.e., habitat) and laboratory (i.e., invertebrate and water chemistry) data are housed in Environment Canada's CABIN database and are accessible to anyone once a user account is created (<http://cabin.cciw.ca/Application/welcome.asp>). A preliminary RCA model was developed (Rempel et al. 2008) and is being refined based on improved taxonomic information (presented in this report). Once finalized, the RCA model will be uploaded to CABIN. With the model available online, CABIN users may submit invertebrate and habitat data from newly sampled sites to assess the site's status relative to reference condition.

In total, 34 environmental variables were either measured in the field or compiled from GIS and climate station databases for each of the 102 stream sites (Table 1). These variables may contribute directly or indirectly both to fish habitat conditions at a site and the taxonomic assemblage of resident macroinvertebrates.

Study data are presented in the following tables. Invertebrate data are in Table 2; site habitat data are located in Table 3; watershed and landscape data are presented in Table 4 and Table 5; water quality and chemistry data are in Table 6, Table 7 and Table 8; and air temperature and precipitation data are in Table 9 and Table 10, respectively. In each of the tables, sampling sites are ordered alphabetically according to site name. Appendix 3 presents 1-page summary sheets for each of the 102 sites, alphabetically ordered, as a reference for basic site information and photographs.

The total number of invertebrates collected in kicknet and Ponar samples was 235,828 individuals representing 54 distinct taxonomic families. Identifications to lower taxonomic levels included 186 unique genera and 27 species. Insects dominated the overall invertebrate community in abundance (83%), with non-insect taxa comprising 17% of the total (Table 2). Of the non-insects, the groups were: Annelida (aquatic earthworms), Arachnida (spiders), Mollusca (clams and snails), Branchiopoda (mainly waterfleas), Hydrozoa, Nemata (roundworms or nematodes), Platyhelminthes (flatworms), Malacostraca (mainly amphipods, ostracods, and opossum shrimp), and Maxillopoda. Insects consisted of Coleoptera

(beetles), Diptera (flies), Ephemeroptera (mayflies), Heteroptera (true bugs), Odonata (damselflies and dragonflies), Plecoptera (stoneflies), and Trichoptera (caddisflies). Diptera (91% Chironomidae) dominated the insect community, comprising 60% of the total number of organisms collected. Ephemeroptera, Plecoptera, and Trichoptera (Total EPT) comprised 40% of the insect community (33% of all invertebrates collected). The prevalence of each of the EPT orders was similar.

Major taxonomic differences were evident in invertebrate samples collected by Ponar grab from non-wadeable, soft-bottomed deltaic sites compared to wadeable sites sampled by kicknet. The invertebrate community of stony-bottomed streams was dominated by EPT, whereas Annelida (Nadidae and Tubificidae), Bivalves and Chironomidae were dominant at the soft-bottomed sites. Taxonomic diversity also differed between stony- and soft-bottomed sites: 41 families in 23 orders were collected from Ponar sites compared to 82 families in 29 orders collected at kicknet sites. Of the 186 genera identified, 66 were collected at all Ponar sites combined, compared with 181 genera collected at the kicknet sites. Three taxa were found to occur exclusively in Ponar samples: two chironomid genera (*Paratendipes* and *Zalutschia*), and one spider (*Arrenurus*). However, the three taxa occurred in very small numbers. At the family level, EPT richness (total # of families belonging to the orders Ephemeroptera, Plecoptera and Trichoptera) for Ponar samples was 3 times lower than for kicknet samples. Forty-six percent of the overall chironomid genera ($n = 57$) were identified from samples taken from Ponar sites.

Reach-scale habitat characteristics measured during field sampling are presented in Table 3. Most sites had low riparian canopy coverage and low in-stream macrophyte coverage. A wide variety of habitat types was observed, with the most common types being riffles, runs and pools. Substrate conditions were highly variable, ranging from completely embedded fine sediment to unembedded coarse gravels and cobbles. The majority of channels were wadeable and under 50 m bankfull width. High channel ratio values (wetted width / bankfull width approaching 1.0) generally corresponded with areas of permafrost, which constrains channel width by impeding lateral erosion. For channels too deep for wading, the maximum depth value indicated maximum wadeable depth. Particularly large channels in this study include East, Kuluarpak and Kumak Channels in the delta region, and Dahadinni River, Mackenzie River, and Willowlake River to the south.

Watershed attributes were reliably derived for kicknet sampling sites only (Table 4). Sites sampled by Ponar grab were typically situated in basins with low relief (e.g., deltaic channels), making the watershed boundaries problematic for delineation. Because separate RCA models would be developed for the kicknet and Ponar sites, missing watershed attributes for Ponar sites was not an issue for model development. Watershed attribute values presented in Table 4 reflect the wide range of basin and stream sizes sampled.

Landscape attributes describing permafrost conditions, surficial geology and drainage conditions at each of the sample sites are presented in Table 5. There is substantial variation in landscape conditions over the 1200-km long study area. Most outer deltaic sites have discontinuous permafrost with medium ice content, reflecting the warming effect of the Mackenzie River on the surrounding terrain. Inland sites range between continuous permafrost at some higher elevation sites to discontinuous and sporadic permafrost with decreasing latitude. Surficial materials are typically morainal or alluvial across the study area and drainage conditions are mostly imperfect to poor. Moderately well-drained sites are generally situated in steeper terrain.

In situ water quality attributes included temperature, pH, conductivity, turbidity and dissolved oxygen (Table 6). Although some dissolved oxygen data are presented, they are considered unreliable due to inconsistent instrument operation.

The water chemistry at sample sites based on bottle grab samples is presented in Table 7 (diagnostic analytes and nutrients) and Table 8 (metal concentrations). Although the chemical characteristics of a site are important for determining biological productivity, water quality and chemistry variables are not generally included in an RCA model as predictor variables because their values are likely to change due to disturbance from human activities. The data are instead useful as general habitat information and for possible future use in examining the cause of disturbance and degree of ecological impairment at a particular site.

The density of climate stations along the Mackenzie River Valley is relatively sparse and the data record of some existing stations is incomplete. These factors proved problematic for assembling climate data for RCA model development, and interpolation from nearby stations was necessary for some sample sites. Based on available data, coldest temperatures are recorded in January, and July is the warmest month on average (Table 9). Precipitation is lowest in April and highest during the summer months of June through August as rain (Table 10). Variation among sample sites reflects the influence on climate of highly variable terrain and hydrologic features, including the Mackenzie River and Beaufort Sea.

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Table 1. List of habitat attributes assessed in the field and method of data collection. See Appendix 2 (field data sheets) for further details.

HABITAT ATTRIBUTE	METHOD OR STANDARD USED
General Site Information	
Location	Recorded latitude, longitude and elevation based on a hand-held Global Positioning System (GPS). A site description was noted and site diagram completed.
Photographs	Digital photos taken of the completed field sheet, the channel substrate (with 50-cm quadrat for scale), and of the site looking upstream, downstream, and across the channel. Aerial photos taken while approaching and/or leaving the site by helicopter.
Reach Characteristics	
Habitat types present	Recorded all habitats present in the assessment reach (a distance of 6x bankfull width). Categories: hydraulic jump, chute, rapids, riffle, run, pool or back eddy, debris dam.
Habitat type sampled	Recorded the habitat from which the invertebrate sample was collected.
Canopy coverage	Recorded the % range of canopy coverage over the stream within the survey reach (scored in one of four range categories).
Macrophyte coverage	Recorded the % range of the streambed covered by vascular plants within the survey reach (scored in one of four range categories).
Riparian vegetation	Recorded all riparian vegetation types in the assessment reach. Categories: barren, grasses, shrubs, deciduous forest, coniferous forest.
Dominant riparian vegetation	Recorded the dominant riparian vegetation type in the survey reach.
Benthic Invertebrates	
Kicknet samples	In wadeable streams with flow (76 sites), invertebrate samples collected in riffle habitat by kicknet (400- μ m mesh). The kicknet operator moved across the channel and upstream in a zig-zag pattern, kicking substrate and collecting sample for 3 minutes. The timer was stopped anytime the net was not in the water.
Ponar grabs	In non-wadeable waters or streams without flow (26 sites), invertebrate samples collected using a petite Ponar grab with a sample area of 151 x 171 mm (0.026 m ²) and a grab depth of 10 cm. The Ponar was operated by hand from the stream bank.
Sample Processing	Invertebrate samples dispensed into a plastic bucket, large debris cleaned and removed, and excess water decanted. Sample stored in a labelled whirlpak bag with 10% buffered formalin to preserve the contents for laboratory analysis.

HABITAT ATTRIBUTE	METHOD OR STANDARD USED
Substrate	
Composition	Recorded particle size class of the dominant, sub-dominant and surrounding substrate material using the Wentworth Scale and based on the 20-stone Pebble Count and visual estimation (visual scores independently determined by each member of the field crew and the average value recorded). Refer to Appendix 2 for further details.
Embeddedness	Recorded degree of embeddedness based on a categorical scale of 1 to 5.
Pebble Count	Modified Wolman Pebble Count (Wolman 1954) completed at wadeable sites by measuring the a-axis and b-axis diameter of 20 randomly-selected particles within the stream reach using a gravelometer. Dominant particle size was determined as the most frequent b-axis size class.
Stream Channel Measurements	
Gradient	Measured using a clinometer and reported in %.
Stream Widths	Average values of the wetted and bankfull width at three representative cross-sections within the assessment reach.
Velocity and depth profiles	Average and maximum values of velocity and depth measured at 5 equidistant points along each of up to 3 channel cross-sections in vicinity of the kicknet sample using a Marsh-McBirney current meter. Velocity was measured at 0.6 x total depth. For non-wadeable channels, cross-sections extended to the maximum depth of safe wading.
Water Chemistry	
Water Temperature	Measured <i>in situ</i> using a Hydrolab.
pH	Measured <i>in situ</i> using a Hydrolab.
Specific Conductance	Measured <i>in situ</i> using a Hydrolab.
Total Dissolved Solids	Measured <i>in situ</i> using a Hydrolab.
Dissolved Oxygen	Data excluded from site descriptions and modeling due to questionable performance of the sampling device in each year.
Turbidity	Measured <i>in situ</i> using a Hydrolab.

HABITAT ATTRIBUTE	METHOD OR STANDARD USED
Water Chemistry (cont.)	<p>Collected in bottles according to sampling procedures specified by the analytical laboratory. Sample bottles included:</p> <ul style="list-style-type: none"> • 1 L for general ions (alkalinity, chloride, true colour, sulphate, total dissolved solids, total suspended solids and turbidity); • 250 mL for nutrients (ammonia, nitrite, nitrate, total nitrogen; orthophosphorus, total phosphorus); • 250 mL for total organic carbon; and • 250 mL for total metals (collected in acid washed bottle, with HNO₃ preservative added in the field). <p>Water samples sent to laboratory using fastest air service available to satisfy the recommended maximum 72-hr holding time. Metals analysis was done using ICPMS, and all other parameters were analyzed according to methods in APHA (2007).</p>
Water Samples	

Table 2. Genus-level enumerations of benthic invertebrates collected by kicknet or Ponar from the 102 streams (listed alphabetically by site name) sampled in the Mackenzie River Valley following the Reference Condition Approach (2005-2007).

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Aklak Channel (2007) 69.3231 N 135.2208 W	AKLA002	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		6
					Annelida	Clitellata	Haplotaxida	Tubificidae		4
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Brillia</i>	1
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Cladopelma</i>	2
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Monodiamesa</i>	3
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Procladius</i>	47
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Stictochironomus</i>	4
					Arthropoda	Malacostraca	Ostracoda			1
					Arthropoda	Maxillipoda	Copepoda			1
					Mollusca	Gastropoda				1
					Nemata					2
					Total					72
Big Lake Creek (2006) 67.4921 N 131.3488 W	BIGL1	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		98
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		20
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		42
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Euryhapsis</i>	10
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Orthoclaudiinae</i>	20
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Potthastia</i>	20
					Arthropoda	Insecta	Diptera	Chironomidae		9
					Arthropoda	Insecta	Diptera	Empididae	<i>Chelifera</i>	21
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	<i>Ameletus</i>	3
					Arthropoda	Insecta	Ephemeroptera	Baetidae	<i>Acentrella turbida</i>	7
					Arthropoda	Insecta	Ephemeroptera	Baetidae	<i>Baetis</i>	1
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	<i>Ephemerella</i>	43
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	<i>Heptagenia</i>	29
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	<i>Rhithrogena</i>	49
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	<i>Suwallia</i>	49
					Arthropoda	Insecta	Plecoptera	Perlodidae	<i>Skwala</i>	13
					Arthropoda	Insecta	Trichoptera	Brachycentridae	<i>Brachycentrus</i>	6
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	<i>Lepidostoma</i>	1
					Arthropoda	Insecta	Trichoptera	Leptoceridae	<i>Ceraclea</i>	4
					Mollusca	Bivalvia	Veneroida	Pisidiidae		3
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	<i>Valvata sincera</i>	4
					Nemata					12
					Total					464

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Big Lake Creek (2006) 67.4921 N 131.3488 W	BIGL1	Kicknet	2	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		72
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhapsis	1
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	22
					Arthropoda	Insecta	Diptera	Chironomidae	Potthastia	10
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	55
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	13
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	4
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	1
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	13
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	8
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	79
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	56
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	15
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	3
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Arctopsyche	1
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Ceraclea	4
					Arthropoda	Malacostraca	Ostracoda			3
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		56
					Mollusca	Bivalvia	Veneroida	Pisidiidae		12
					Mollusca	Gastropoda	Heterostropha	Valvatidae	Valvata sincera	2
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Big Lake Creek (2006) 67.4921 N 131.3488 W	BIGL1	Kicknet	3	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		132
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Euryhapsis</i>	6
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	11
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Potthastia</i>	18
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Tanytarsus</i>	32
					Arthropoda	Insecta	Diptera	Empididae	<i>Chelifera</i>	41
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	<i>Ameletus</i>	5
					Arthropoda	Insecta	Ephemeroptera	Baetidae	<i>Baetis</i>	1
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	<i>Ephemerella</i>	32
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	<i>Heptagenia</i>	32
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	<i>Rhithrogena</i>	93
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	<i>Suwallia</i>	42
					Arthropoda	Insecta	Plecoptera	Perlodidae	<i>Skwala</i>	24
					Arthropoda	Insecta	Trichoptera	Brachycentridae	<i>Brachycentrus</i>	12
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	<i>Arctopsyche</i>	3
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	<i>Lepidostoma</i>	1
					Arthropoda	Insecta	Trichoptera	Leptoceridae	<i>Ceraclea</i>	7
					Arthropoda	Malacostraca	Ostracoda			11
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		19
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		39
					Mollusca	Bivalvia	Veneroida	Pisidiidae		12
					Mollusca	Gastropoda	Heterostropho	Valvatidae	<i>Valvata sincera</i>	2
									Total	575
Big Smith Creek (2006) 64.5929 N 124.8077 W	BGSM349	Ponar	1	Ref-Pipe	Arthropoda	Insecta	Diptera	Chironomidae	<i>Corynoneura</i>	7
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Diamesa</i>	12
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	35
					Arthropoda	Insecta	Diptera	Chironomidae	<i>Robackia</i>	37
					Arthropoda	Insecta	Diptera	Chironomidae		20
					Arthropoda	Insecta	Diptera	Empididae	<i>Chelifera</i>	1
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		4
					Mollusca	Gastropoda	Heterostropho	Valvatidae	<i>Valvata sincera</i>	1
									Total	117

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Billy Creek (2005)	BILL299	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida			4
65.3411 N 127.1181 W					Annelida	Clitellata	Rhynchobdellida	Glossiphoniidae		24
					Annelida	Oligochaeta				20
					Arthropoda	Insecta	Diptera	Ceratopogonidae		60
					Arthropoda	Insecta	Diptera	Chironomidae	Chaetocladius	140
					Arthropoda	Insecta	Diptera	Chironomidae	Metriocnemus	4
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra/Tanytarsus	4
					Arthropoda	Insecta	Diptera	Chironomidae	Microtendipes	4
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	100
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum aviceps	380
					Arthropoda	Insecta	Diptera	Chironomidae	Tvetenia	192
					Arthropoda	Insecta	Diptera	Empididae	Clinocera	20
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	156
					Arthropoda	Insecta	Ephemeroptera	Caenidae		108
					Arthropoda	Insecta	Plecoptera	Nemouridae		16
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae		4
					Arthropoda	Insecta	Trichoptera	Polycentropodidae		4
					Arthropoda	Malacostraca	Amphipoda	Gammaridae	Gammarus lacustris	92
					Arthropoda	Malacostraca	Conchostraca			96
					Arthropoda	Malacostraca	Ostracoda			20
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	20
					Mollusca	Gastropoda				16
									Total	1484

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Borrow Pit (2007) 68.7931 N 134.1750 W	BOR2017	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		183
					Annelida	Clitellata	Haplotaxida	Tubificidae		133
					Arthropoda	Branchiopoda	Cladocera	Daphniidae		133
					Arthropoda	Insecta	Diptera	Chironomidae	Ablabesmyia(Karelia)	50
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	400
					Arthropoda	Insecta	Diptera	Chironomidae	Pseudokiefferiella	117
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	250
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	233
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	50
					Arthropoda	Insecta	Diptera	Chironomidae	Tribelos	83
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	33
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	17
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	83
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	50
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	33
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	3400
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	267
					Arthropoda	Insecta	Trichoptera	Limnephilidae		100
					Arthropoda	Malacostraca	Ostracoda			467
					Arthropoda	Maxillipoda	Cyclopoida			100
					Chelicerata	Arachnida	Oribatei	Hydrozetidae		17
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	67
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	233
					Chelicerata	Arachnida	Prostigmata			167
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	167
					Mollusca	Gastropoda	Heterostropho	Valvatidae	Valvata sincera	100
					Nemata					517
									Total	7450

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Borrow Pit (2007) 68.7931 N 134.1750 W	BOR2017	Kicknet	2	Ref-Pipe	Annelida	Clitellata	Haplotaaxida	Naididae		23
					Annelida	Clitellata	Haplotaaxida	Tubificidae		15
					Arthropoda	Branchiopoda	Cladocera			62
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	23
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	15
					Arthropoda	Insecta	Diptera	Chironomidae	Eukiefferiella	15
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	131
					Arthropoda	Insecta	Diptera	Chironomidae	Pseudokiefferiella	115
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	162
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	115
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	23
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	15
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	23
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	1485
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	192
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	8
					Arthropoda	Insecta	Trichoptera	Limnephilidae		100
					Arthropoda	Malacostraca	Ostracoda			62
					Arthropoda	Maxillipoda	Cyclopoida			39
					Chelicerata	Arachnida	Oribatei	Hydrozetidae		31
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	39
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	46
					Chelicerata	Arachnida	Prostigmata			31
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	77
					Nemata					162
								Total		3009

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Borrow Pit (2007) 68.7931 N 134.1750 W	BOR2017	Kicknet	3	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		117
					Annelida	Clitellata	Haplotaxida	Tubificidae		33
					Arthropoda	Branchiopoda	Cladocera			100
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	50
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	550
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	150
					Arthropoda	Insecta	Diptera	Chironomidae	Synorthocladus	150
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	83
					Arthropoda	Insecta	Diptera	Empididae	Clinocera	17
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	17
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		17
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	867
					Arthropoda	Insecta	Plecoptera	Nemouridae		4650
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	17
					Arthropoda	Insecta	Trichoptera	Limnephilidae		117
					Arthropoda	Insecta	Trichoptera			50
					Arthropoda	Malacostraca	Ostracoda			400
					Arthropoda	Maxillipoda	Cyclopoida			183
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	133
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	133
					Chelicerata	Arachnida	Prostigmata			67
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	17
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	100
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	267
					Nemata					333
								Total		8618

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Bosworth Creek (2005) 65.3050 N 126.8889 W	BOSW301	Kicknet	1	Ref-Pipe	Annelida	Clitellata				21
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	65
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	45
					Arthropoda	Insecta	Diptera	Chironomidae	Demicryptochironomus	6
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra/Tanytarsus	14
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	5
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	9
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	21
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	13
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	1
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	115
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	8
					Arthropoda	Insecta	Diptera	Tipulidae		2
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	4
					Arthropoda	Insecta	Ephemeroptera	Ameletidae		2
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	9
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	1
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis tricaudatus	226
					Arthropoda	Insecta	Ephemeroptera	Baetidae		11
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella dorothea	45
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Cinygmula	3
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		26
					Arthropoda	Insecta	Heteroptera			1
					Arthropoda	Insecta	Plecoptera	Capniidae		40
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		21
					Arthropoda	Insecta	Plecoptera	Nemouridae		28
					Arthropoda	Insecta	Plecoptera	Perlodidae		4
					Arthropoda	Insecta	Plecoptera	Pteronarcyidae		2
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		132
					Arthropoda	Insecta	Trichoptera	Hydroptilidae		3
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae		6
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	20
					Mollusca	Gastropoda	Basommatophora	Planorbidae		1
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Brackett River (2006) 64.9994 N 125.4629 W	BRAC1	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		270
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	7
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladiinae	142
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladius	71
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	497
					Arthropoda	Insecta	Diptera	Chironomidae		539
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	92
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	21
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	362
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	135
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Sweltsa	36
					Arthropoda	Insecta	Plecoptera	Perlidae	Claassenia	7
					Arthropoda	Insecta	Plecoptera	Perlidae		14
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	71
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Arctopsyche	28
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		21
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	21
					Arthropoda	Insecta	Trichoptera	Polycentropodidae	Neureclipsis bimaculata	14
					Arthropoda	Malacostraca	Ostracoda			21
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		92
					Mollusca	Bivalvia	Veneroida	Pisidiidae		7
					Nemata					7
Total										2475
Campbell Creek (2006) 68.2862 N 133.2478 W	CAMPCK	Ponar	1	Test	Annelida	Clitellata	Haplotaxida	Naididae		18
					Annelida	Clitellata	Haplotaxida	Tubificidae		11
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		4
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	7
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	426
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladiinae	284
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	36
					Arthropoda	Insecta	Diptera	Chironomidae	Potthastia	53
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsini	319
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	160
					Arthropoda	Insecta	Diptera	Chironomidae		89
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Oecetis	4
					Mollusca	Bivalvia	Pelecypoda			18
					Nemata					7
Total										1436

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Campbell River (2007) 68.1275 N 133.6428 W	CAMP1	Ponar	1	Ref-Future	Annelida	Ciliellata	Haplotaxida	Tubificidae		5
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomysia	2
					Arthropoda	Insecta	Diptera	Chironomidae	Dicrotendipes	1
					Arthropoda	Insecta	Diptera	Chironomidae	Limnophyes	1
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	23
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaudiinae	10
					Arthropoda	Insecta	Diptera	Chironomidae	Paratendipes	17
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedium	5
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	4
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	6
					Arthropoda	Malacostraca	Isopoda	Chaetiliidae	Saduria	4
					Arthropoda	Malacostraca	Ostracoda			4
					Arthropoda	Maxillipoda	Cyclopoida			2
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	1
					Chelicerata	Arachnida	Prostigmata			1
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	4
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	3
					Nemata					10
								Total		103

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Canyon Creek (2005) 65.2219 N 126.5269 W	CANY306	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Lumbriculida	Lumbriculidae	Rhynchelmis	176
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	48
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	8
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	12
					Arthropoda	Insecta	Diptera	Chironomidae	Tvetenia	224
					Arthropoda	Insecta	Diptera	Chironomidae		12
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	16
					Arthropoda	Insecta	Diptera	Empididae	Wiedemannia	48
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	80
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	4
					Arthropoda	Insecta	Ephemeroptera	Ameletidae		4
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	24
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	296
					Arthropoda	Insecta	Ephemeroptera	Baetidae		8
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella dorothea	40
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Epeorus albertae	4
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		128
					Arthropoda	Insecta	Plecoptera	Capniidae		84
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		28
					Arthropoda	Insecta	Plecoptera	Nemouridae		124
					Arthropoda	Insecta	Plecoptera	Perlodidae		36
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		560
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	16
					Platyhelminthes	Turbellaria	Tricladida	Planariidae	Polycelis coronata	16
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Chick Creek (2005) 65.8550 N 128.1339 W	CHIC267	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		13
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	20
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	23
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	86
					Arthropoda	Insecta	Diptera	Chironomidae	Tanypodinae	2
					Arthropoda	Insecta	Diptera	Chironomidae	Tvetenia	13
					Arthropoda	Insecta	Diptera	Chironomidae		2
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	14
					Arthropoda	Insecta	Diptera	Empididae	Clinocera	13
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	14
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	4
					Arthropoda	Insecta	Diptera			2
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella insignificans	39
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	50
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis flavistriga	14
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis tricaudatus	4
					Arthropoda	Insecta	Ephemeroptera	Baetidae		20
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Cinygmula	4
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Epeorus albertae	27
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		2
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		27
					Arthropoda	Insecta	Plecoptera	Nemouridae		195
					Arthropoda	Insecta	Trichoptera	Brachycentridae		7
					Arthropoda	Insecta	Trichoptera	Rhyacophilidae		4
					Chelicerata	Arachnida	Prostigmata			2
					Nemata					2
Total									603	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Cili Creek (2006) 61.9686 N 123.4401 W	CLI 1	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		32
					Arthropoda	Branchiopoda	Cladocera			48
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	16
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsini	1688
					Arthropoda	Insecta	Diptera	Chironomidae		208
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	2288
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	8
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	8
					Arthropoda	Insecta	Ephemeroptera	Ephemeridae	Ephemera	8
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	8
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	8
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	40
					Arthropoda	Insecta	Trichoptera	Polycentropodidae		8
					Arthropoda	Insecta	Trichoptera			24
					Arthropoda	Malacostraca	Ostracoda			8
					Arthropoda	Maxillipoda	Cyclopoida			16
					Mollusca	Bivalvia	Veneroida	Pisidiidae		40
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	32
					Nemata					8
								Total		4496
Dahadinni River (2006)	DAHA1	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		1
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	1
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	1
					Arthropoda	Insecta	Diptera	Chironomidae	Robackia	1
					Arthropoda	Insecta	Diptera	Chironomidae		1
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	1
					Arthropoda	Insecta	Diptera	Ephydriidae		1
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	88
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	6
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		5
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	3
					Arthropoda	Insecta	Heteroptera	Corixidae	Corisella	1
					Arthropoda	Insecta	Plecoptera	Capniidae		104
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		1
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		6
								Total		223

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Dam Creek (2006) 63.7851 N 123.8286 W	DAM381	Kicknet	1	Ref-Pipe	Annelida	Ciliellata	Haplotaixida	Naididae		12
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	10
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	7
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladiinae	333
					Arthropoda	Insecta	Diptera	Chironomidae	Pseudosmittia	10
					Arthropoda	Insecta	Diptera	Chironomidae		37
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	17
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	10
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	3
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	5
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	25
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	59
					Arthropoda	Insecta	Odonata	Libellulidae		3
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	10
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	143
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Hydroptila	3
					Arthropoda	Malacostraca	Ostracoda			5
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		96
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		17
					Mollusca	Bivalvia	Veneroida	Pisidiidae		7
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	3
					Mollusca	Gastropoda	Basommatophora	Planorbidae		22
					Mollusca	Gastropoda	Heterostropha	Valvatidae	Valvata sincera	136
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Dehtthih Dehe River (2006) 60.4555 N 120.2034 W	DEHT1	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Tubificidae		6
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	4
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	16
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	6
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladiinae	40
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	158
					Arthropoda	Insecta	Diptera	Chironomidae	Robackia	2
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	16
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	24
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	2
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	10
					Arthropoda	Insecta	Diptera			4
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	8
					Arthropoda	Insecta	Plecoptera	Capniidae		40
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	14
					Arthropoda	Insecta	Plecoptera	Nemouridae		210
					Arthropoda	Insecta	Plecoptera	Perlodidae	Arcynopteryx	6
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Micrasema	18
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	14
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		50
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		56
					Mollusca	Gastropoda	Neotaenioglossa	Hydrobiidae		2
					Nemata					4
Total									710	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Dehtthih Dehe River (2006) 60.4555 N 120.2034 W	DEHT1	Kicknet	2	Ref-Future	Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	2
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	50
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	90
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	70
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	28
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	10
					Arthropoda	Insecta	Diptera	Tabanidae	Tabanus	2
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	12
					Arthropoda	Insecta	Diptera	Tipulidae	Limonia	2
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	10
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	4
					Arthropoda	Insecta	Plecoptera	Capniidae		60
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	22
					Arthropoda	Insecta	Plecoptera	Nemouridae		332
					Arthropoda	Insecta	Plecoptera	Perlodidae	Arcynopteryx	4
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Micrasema	24
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	4
					Arthropoda	Insecta	Trichoptera	Limnephilidae		2
					Arthropoda	Malacostraca	Ostracoda			4
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		86
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		100
					Mollusca	Gastropoda	Neotaenioglossa	Hydrobiidae		2
					Nemata					4
Total									924	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts				
Dehtthih Dehe River (2006) 60.4555 N 120.2033 W	DEHT1	Kicknet	3	Ref-Future	Annelida	Clitellata	Lumbriculida	Lumbriculidae		1				
					Arthropoda	Insecta	Coleoptera	Dytiscidae	Agabus	11				
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	3				
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	17				
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	37				
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	133				
					Arthropoda	Insecta	Diptera	Chironomidae		6				
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	23				
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	1				
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	5				
					Arthropoda	Insecta	Diptera	Tipulidae	Limonia	3				
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	38				
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	3				
					Arthropoda	Insecta	Plecoptera	Capniidae		90				
					Arthropoda	Insecta	Plecoptera	Nemouridae		47				
					Arthropoda	Insecta	Plecoptera	Perlodidae	Arcynopteryx	6				
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Micrasema	6				
					Arthropoda	Malacostraca	Ostracoda			12				
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		117				
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		26				
					Total									585
Dodo Creek (2006) 64.9859 N 127.2837 W	DODO1	Kicknet	1	Ref-Future	Annelida	Clitellata	Lumbriculida	Lumbriculidae		8				
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	40				
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	44				
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladius	48				
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	44				
					Arthropoda	Insecta	Diptera	Empididae	Wiedemannia	20				
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	4				
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	12				
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	32				
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Drunella doddsi	4				
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	28				
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	48				
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		52				
					Arthropoda	Insecta	Plecoptera	Capniidae		544				
					Arthropoda	Insecta	Plecoptera	Perlodidae	Isoperla	8				
					Arthropoda	Insecta	Plecoptera	Perlodidae		20				
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae	Taenionema	380				
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		20				
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		32				
					Total									1385

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Donnelly River (2005) 65.8689 N 128.1880 W	DONN266	Kicknet	1	Ref-Pipe	Annelida	Clitellata				100
					Arthropoda	Branchiopoda	Cladocera			133
					Arthropoda	Insecta	Diptera	Chironomidae		3983
					Arthropoda	Insecta	Diptera	Empididae		33
					Arthropoda	Insecta	Diptera	Simuliidae		300
					Arthropoda	Insecta	Ephemeroptera	Baetidae		17
					Arthropoda	Insecta	Plecoptera	Nemouridae		17
					Arthropoda	Insecta	Trichoptera	Brachycentridae		17
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae		17
					Arthropoda	Insecta	Trichoptera	Leptoceridae		67
					Arthropoda	Insecta	Trichoptera	Polycentropodidae		2200
					Arthropoda	Malacostraca	Amphipoda			200
					Arthropoda	Malacostraca	Ostracoda			17
					Arthropoda	Maxillipoda	Calanoida			100
					Chelicerata	Arachnida				50
					Mollusca	Bivalvia				533
					Mollusca	Gastropoda				33
					Total					
Douglas Creek (2006) 68.5477 N 133.8675 W	DOUG1	Ponar	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		1
					Arthropoda	Insecta	Coleoptera			1
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	60
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	70
					Arthropoda	Insecta	Diptera	Chironomidae		3
					Arthropoda	Malacostraca	Ostracoda			3
					Chelicerata	Arachnida				1
					Nemata					1
Total									140	
East Channel (2006) 69.1324 N 134.3128 W	EAST013	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		3
					Arthropoda	Insecta	Diptera	Chironomidae	Chironomus	5
					Arthropoda	Insecta	Diptera	Chironomidae	Monodiamesa	1
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	4
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	10
					Arthropoda	Insecta	Diptera	Chironomidae		11
					Arthropoda	Malacostraca	Ostracoda			2
					Nemata					16
Total									52	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Elliot Creek (2005) 65.5231 N 127.6261 W	ELL1288	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		6
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	46
					Arthropoda	Insecta	Diptera	Chironomidae	Brillia	26
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	36
					Arthropoda	Insecta	Diptera	Chironomidae		12
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	8
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	62
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	4
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	8
					Arthropoda	Insecta	Ephemeroptera	Baetidae		8
					Arthropoda	Insecta	Plecoptera	Capniidae		466
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		4
					Arthropoda	Insecta	Plecoptera	Nemouridae		64
					Arthropoda	Insecta	Plecoptera	Perlodidae		22
					Arthropoda	Insecta	Trichoptera	Brachycentridae		6
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		4
					Arthropoda	Malacostraca	Ostracoda			4
					Chelicerata	Arachnida	Prostigmata			2
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	2
					Total					
Fish Trap Creek (2006) 67.9747 N 132.2562 W	FISH1	Ponar	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Lumbricidae		15
					Annelida	Clitellata	Haplotaxida	Tubificidae		2
					Arthropoda	Branchiopoda	Cladocera			3
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	4
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	2
					Arthropoda	Insecta	Diptera	Chironomidae	Cryptochironomus	12
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	3
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	5
					Arthropoda	Insecta	Diptera	Chironomidae		43
					Arthropoda	Malacostraca	Ostracoda			28
					Mollusca	Bivalvia	Veneroida	Pisidiidae		4
					Mollusca	Gastropoda	Heterostropha	Valvatidae	Valvata sincera	2
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Francis Creek (2005) 65.2042 N 126.4572 W	FRAN308	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		96
					Arthropoda	Insecta	Diptera	Ceratopogonidae		1
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	2
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	137
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	75
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra/Tanytarsus	2
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	1
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	1
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	3
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	1
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	11
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis flavistriga	1
					Arthropoda	Insecta	Ephemeroptera	Baetidae		3
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella dorothea	1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		7
					Arthropoda	Insecta	Plecoptera	Capniidae		165
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		2
					Arthropoda	Maxillipoda	Cyclopoida			6
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	2
					Total					
Gossage Creek (2006) 66.9476 N 130.3716 W	GOSS1	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		3
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		5
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	43
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhapsis	8
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	40
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladius	27
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	533
					Arthropoda	Insecta	Diptera	Chironomidae		91
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	5
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	67
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	3
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	3
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	64
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	552
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	5
					Arthropoda	Insecta	Trichoptera	Rhyacophilidae	Rhyacophila	5
					Arthropoda	Malacostraca	Ostracoda			8
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Hanna River (2005) 65.6419 N 127.8081 W	HANN285	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaixida	Naididae		3
					Arthropoda	Insecta	Coleoptera	Elmidae		1
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	1
					Arthropoda	Insecta	Diptera	Chironomidae	Heleniella	4
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra/Tanytarsus	4
					Arthropoda	Insecta	Diptera	Chironomidae	Rheosmittia	17
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	7
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemanniella xena	1
					Arthropoda	Insecta	Diptera	Chironomidae	Tvetenia	13
					Arthropoda	Insecta	Diptera	Chironomidae		13
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	3
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	16
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	3
					Arthropoda	Insecta	Ephemeroptera	Ameletidae		42
					Arthropoda	Insecta	Ephemeroptera	Baetidae		58
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae		9
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	19
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena undulata	32
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	65
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		104
					Arthropoda	Insecta	Plecoptera	Capniidae		78
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		70
					Arthropoda	Insecta	Plecoptera	Nemouridae		3
					Arthropoda	Insecta	Plecoptera	Perlodidae		32
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae		2
					Arthropoda	Insecta	Trichoptera	Apataniidae		5
					Arthropoda	Insecta	Trichoptera	Brachycentridae		1
					Arthropoda	Insecta	Trichoptera	Glossosomatidae		2
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		10
					Arthropoda	Insecta	Trichoptera	Limnephilidae		1
					Arthropoda	Insecta	Trichoptera			1
					Chelicerata	Arachnida	Oribatei	Hydrozetidae		1
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	4
					Chelicerata	Arachnida	Prostigmata			1
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	1
								Total		627
Hans Creek (2006) 68.7732 N 133.7715 W	HANS036	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaixida	Naididae		2
					Annelida	Clitellata	Rhynchobdellida	Hirudinidae		1
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	1
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladus	4
					Arthropoda	Insecta	Diptera	Chironomidae		4
								Total		12

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Harris River (2007) 61.8786 N 121.2908 W	HARR466	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		346
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		46
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	239
					Arthropoda	Insecta	Coleoptera	Elmidae		462
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomys	23
					Arthropoda	Insecta	Diptera	Chironomidae	Demicryptochironomus	8
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhopsis	8
					Arthropoda	Insecta	Diptera	Chironomidae	Krenosmittia	8
					Arthropoda	Insecta	Diptera	Chironomidae	Phaenopsectra	54
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	62
					Arthropoda	Insecta	Diptera	Chironomidae	Stictochironomus	8
					Arthropoda	Insecta	Diptera	Chironomidae		46
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	200
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	15
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	15
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	8
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	100
					Arthropoda	Insecta	Ephemeroptera	Leptohyphidae	Tricorythodes	8
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae		54
					Arthropoda	Insecta	Ephemeroptera	Metretopodidae	Metretopus	8
					Arthropoda	Insecta	Heteroptera	Corixidae		23
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	8
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Swellia	8
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		85
					Arthropoda	Insecta	Plecoptera	Perlodidae	Diura	15
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	8
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		8
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Hydroptila	77
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	154
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Ceraclea	15
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Mystacides	15
					Arthropoda	Insecta	Trichoptera	Phryganeidae	Ptilostomis	23
					Arthropoda	Insecta	Trichoptera			146
					Arthropoda	Malacostraca	Amphipoda	Hyalellidae	Hyalella	46
					Arthropoda	Malacostraca	Ostracoda			39
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobatas	92
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	31
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	8
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchonopsis	15
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae	Torrenticola	23
					Mollusca	Gastropoda	Basommatophora	Ancylidae	Ferrissia	169
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	15
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	115
					Nemata					8
								Total		2864

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Harry Channel (2006) 69.3708 N 134.9279 W	HARR002	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		34
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	1
					Arthropoda	Insecta	Diptera	Chironomidae	Chironomus	28
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	5
					Arthropoda	Insecta	Diptera	Chironomidae		23
					Arthropoda	Malacostraca	Amphipoda	Hyalellidae	Hyalella	1
					Arthropoda	Malacostraca	Mysidacea	Mysidae	Mysis	1
					Arthropoda	Malacostraca	Ostracoda			142
					Nemata					5
					Total					240
Heleva Creek (2005) 65.1919 N 126.4200 W	HELE310	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		46
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	41
					Arthropoda	Insecta	Diptera	Chironomidae	Eukiefferiella	6
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra/Tanytarsus	22
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	116
					Arthropoda	Insecta	Diptera	Empididae	Clinocera	18
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	2
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	14
					Arthropoda	Insecta	Diptera			2
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	211
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	2
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		13
					Arthropoda	Insecta	Plecoptera	Capniidae		19
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		6
					Arthropoda	Insecta	Plecoptera	Nemouridae		75
					Arthropoda	Insecta	Trichoptera	Brachycentridae		13
					Arthropoda	Malacostraca	Ostracoda			2
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	2
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchonopsis	2
					Total					612

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Hodgson Creek (2006) 63.3377 N 123.4634 W	HODG399	Kicknet	1	Test	Arthropoda	Branchiopoda	Cladocera			1
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	2
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	2
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	12
					Arthropoda	Insecta	Diptera	Chironomidae		4
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	1
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	1
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	151
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	4
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Epeorus	1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		11
					Arthropoda	Insecta	Plecoptera	Capniidae		1
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	291
					Arthropoda	Insecta	Plecoptera	Nemouridae	Zapada	5
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	1
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	1
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		5
Total									494	
Hodgson Creek (2006) 63.3377 N 123.4634 W	HODG399	Kicknet	2	Test	Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	4
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	7
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	2
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	1
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	1
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	4
					Arthropoda	Insecta	Diptera	Stratiomyidae		1
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	1
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	1
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	126
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	2
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		16
					Arthropoda	Insecta	Plecoptera	Capniidae		4
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	439
					Arthropoda	Insecta	Plecoptera	Nemouridae	Zapada	1
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	2
Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	1					
Mollusca	Gastropoda				1					
Nemata					1					
Total									611	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Hodgson Creek (2006) 63.3377 N 123.4634 W	HODG399	Kicknet	3	Test	Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	4
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	2
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	2
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	144
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	2
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	486
					Arthropoda	Insecta	Plecoptera	Nemouridae	Zapada	2
								Total		642
Holmes Creek (2006) 69.0867 N 134.2962 W	HOLM1	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Tubificidae		4
					Arthropoda	Insecta	Diptera	Chironomidae	Cryptochironomus	10
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedium	19
					Arthropoda	Insecta	Diptera	Chironomidae	Tanypodinae	6
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsini	301
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	1
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	1
					Arthropoda	Insecta	Trichoptera			3
					Arthropoda	Malacostraca	Ostracoda			21
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		6
					Mollusca	Bivalvia	Veneroida	Pisidiidae		3
					Nemata					4
								Total		379
Husky Creek (2006) 68.8683 N 133.5863 W	HUSK1	Kicknet	1	Ref-Future	Annelida	Clitellata	Lumbriculida	Lumbriculidae		48
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	176
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	560
					Arthropoda	Insecta	Diptera	Chironomidae	Potthastia	144
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsini	448
					Arthropoda	Insecta	Diptera	Chironomidae		592
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	32
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	16
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	64
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	3152
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	80
					Arthropoda	Malacostraca	Ostracoda			48
					Chelicerata	Arachnida	Hydracarina			16
					Nemata					16
								Total		5392

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Jackfish Creek (2005) 66.2661 N 128.5361 W	JACK253	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		36
					Arthropoda	Insecta	Diptera	Chironomidae	Chaetocladius	100
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	20
					Arthropoda	Insecta	Diptera	Chironomidae	Demicryptochironomus	8
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra/Tanytarsus	592
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	160
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	120
					Arthropoda	Insecta	Diptera	Chironomidae		8
					Arthropoda	Insecta	Diptera	Empididae	Clinocera	8
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	16
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	108
					Arthropoda	Insecta	Diptera			4
					Arthropoda	Insecta	Plecoptera	Nemouridae		4
					Arthropoda	Insecta	Trichoptera	Hydroptilidae		4
					Arthropoda	Malacostraca	Amphipoda	Gammaridae	Gammarus lacustris	40
					Arthropoda	Malacostraca	Ostracoda			16
					Arthropoda	Maxillipoda	Cyclopoida			52
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	8
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	16
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchonopsis	40
					Mollusca	Bivalvia	Veneroida	Sphaeriidae		92
					Mollusca	Gastropoda	Basommatophora	Planorbidae		8
										12
Total									1472	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Jean-Marie R1 (2007) 61.4431 N 120.9511 W	JEAN4751	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaenidae	Naididae		16
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	5
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	11
					Arthropoda	Insecta	Diptera	Chironomidae	Lappodiamesa	11
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	5
					Arthropoda	Insecta	Diptera	Chironomidae	Nilotanytus	5
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	11
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	5
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	16
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	63
					Arthropoda	Insecta	Diptera	Simuliidae		84
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	16
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	42
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acerpenna	805
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	21
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	11
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Procladius	5
					Arthropoda	Insecta	Ephemeroptera	Baetidae		5
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	32
					Arthropoda	Insecta	Ephemeroptera	Ephemeridae	Ephemer	5
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	11
					Arthropoda	Insecta	Ephemeroptera	Leptohyphidae	Tricorythodes	5
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Leptophlebia	42
					Arthropoda	Insecta	Ephemeroptera	Metretopodidae	Metretopus	11
					Arthropoda	Insecta	Heteroptera	Corixidae		47
					Arthropoda	Insecta	Plecoptera	Capniidae		5
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwata	26
					Arthropoda	Insecta	Plecoptera	Perlodidae		37
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae	Taeniopteryx	295
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Hydroptila	11
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	32
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Oecetis	11
					Arthropoda	Insecta	Trichoptera	Philopotamidae	Chimarra	32
					Arthropoda	Malacostraca	Ostracoda			5
					Arthropoda	Maxillipoda	Cyclopoida			16
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae	Torrenticola	5
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	21
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	16
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	5
					Nemata					11
								Total		1818

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Jean-Marie R2 (2006) 61.4529 N 121.0078 W	JEAN4752	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		72
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	8
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	472
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	104
					Arthropoda	Insecta	Diptera	Chironomidae		320
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	24
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	16
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	560
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	96
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Eurytrophella	344
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Ecdyonurus	24
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	24
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	32
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	88
					Arthropoda	Insecta	Odonata	Gomphidae	Ophiogomphus	56
					Arthropoda	Insecta	Plecoptera	Perlodidae	Arcynopteryx	32
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	16
					Arthropoda	Insecta	Plecoptera	Perlodidae		48
					Arthropoda	Insecta	Plecoptera	Pteronarcyidae	Pteronarcys	8
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae	Taeniopteryx	48
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Arctopsyche	56
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	80
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	24
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	296
					Arthropoda	Insecta	Trichoptera	Philopotamidae	Wormaldia	48
					Arthropoda	Insecta	Trichoptera	Polycentropodidae	Neureclipsis bimaculata	8
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		80
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		80
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae		72
					Mollusca	Bivalvia	Veneroida	Pisidiidae		512
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Jean-Marie R2 (2006) 61.4529 N 121.0078 W	JEAN4752	Kicknet	2	Ref-Pipe	Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	32
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	32
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	16
					Arthropoda	Insecta	Diptera	Chironomidae	Pseudosmittia	32
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	112
					Arthropoda	Insecta	Diptera	Chironomidae		752
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	16
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	912
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	368
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Eurylophella	176
					Arthropoda	Insecta	Ephemeroptera	Ephemeridae	Ephemera	32
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	400
					Arthropoda	Insecta	Ephemeroptera	Metretopodidae	Metretopus	16
					Arthropoda	Insecta	Plecoptera	Pteronarcyidae	Pteronarcys	16
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae	Taeniopteryx	64
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	112
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Hydroptila	32
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	176
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	272
					Arthropoda	Insecta	Trichoptera	Polycentropodidae	Neureclipsis bimaculata	48
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		80
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		48
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae		48
					Mollusca	Bivalvia	Veneroida	Pisidiidae		336
					Mollusca	Gastropoda	Basommatophora	Ancylidae		16
					Mollusca	Gastropoda	Neotaenioglossa	Hydrobiidae		16
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Jean-Marie R2 (2006) 61.4529 N 121.0078 W	JEAN4752	Kicknet	3	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		64
					Arthropoda	Insecta	Coleoptera	Elmidae		32
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	16
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	160
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	320
					Arthropoda	Insecta	Diptera	Chironomidae		1600
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	80
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	16
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	1952
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Eurylophella	320
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Ecdyonurus	16
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	16
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	192
					Arthropoda	Insecta	Plecoptera	Perlodidae	Arcynopteryx	32
					Arthropoda	Insecta	Plecoptera	Pteronarcyidae	Pteronarcys	16
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae	Taeniopteryx	80
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Hydroptila	32
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	256
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	304
					Arthropoda	Insecta	Trichoptera	Philopotamidae	Wormaldia	48
					Arthropoda	Insecta	Trichoptera	Polycentropodidae	Neureclipsis bimaculata	64
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		128
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		48
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae		80
					Mollusca	Bivalvia	Veneroida	Pisidiidae		656
					Mollusca	Gastropoda	Basommatophora	Ancylidae		32
										48
					Total					
Johnson River (2006) 63.6936 N 123.9662 W	JOHN1	Kicknet	1	Ref-Future	Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	1
					Arthropoda	Insecta	Diptera	Chironomidae		2
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	1
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	7
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	4
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	1
					Arthropoda	Insecta	Plecoptera	Nemouridae		1
					Arthropoda	Insecta	Trichoptera			1
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		1
					Mollusca	Gastropoda	Basommatophora	Planorbidae		1
					Nemata					1
Total									21	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Jungle Ridge Creek (2005) 65.0619 N 126.0619 W	JUNG325	Kicknet	1	Ref-Pipe	Annelida	Oligochaeta				117
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	33
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	5167
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	2167
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra/Tanytarsus	4500
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	4000
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	50
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	67
					Arthropoda	Insecta	Diptera	Chironomidae		567
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	67
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	50
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		17
					Arthropoda	Insecta	Plecoptera	Nemouridae		217
					Arthropoda	Insecta	Trichoptera	Brachycentridae		150
					Arthropoda	Insecta	Trichoptera	Hydroptilidae		33
					Arthropoda	Insecta	Trichoptera	Leptoceridae		17
					Arthropoda	Insecta	Trichoptera			17
					Arthropoda	Malacostraca	Ostracoda			17
					Chelicerata	Arachnida	Prostigmata	Hydryphantidae	Protzia	33
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	100
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	183
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchonopsis	50
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	50
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	50
					Nemata					17
								Total		17736
Kuluarpak Channel (2007) 69.3675 N 134.9878 W	KULU006	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaenidia	Naididae		5
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		1
					Arthropoda	Insecta	Diptera	Chironomidae	Monodiamesa	11
					Arthropoda	Insecta	Diptera	Chironomidae	Paracladopelma	2
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	8
					Arthropoda	Malacostraca	Copepoda			4
					Nemata					6
								Total		37
Kumak Channel (2007) 69.3256 N 135.2553 W	KUMA001	Ponar	1	Ref-Pipe	Arthropoda	Insecta	Diptera	Chironomidae	Paracladopelma	2
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	1
					Total					3

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts				
Little Smith Creek (2006) 64.4345 N 124.7439 W	LTSM351	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Lumbriculida	Lumbriculidae		2				
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	4				
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	2				
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	2				
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhapsis	2				
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	18				
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	24				
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	22				
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	6				
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	92				
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Diphetor	2				
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	260				
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Sweltsa	14				
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	12				
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae		4				
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	146				
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		4				
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		48				
					Total									664
					Loon River (2005) 66.4881 N 128.8489 W	LOON232	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae	
Arthropoda	Insecta	Coleoptera	Elmidae							2				
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae						96				
Arthropoda	Insecta	Diptera	Chironomidae	Constempellina						90				
Arthropoda	Insecta	Diptera	Chironomidae	Tanypodinae						50				
Arthropoda	Insecta	Diptera	Tipulidae	Limnophila						10				
Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus						6				
Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis						14				
Arthropoda	Insecta	Ephemeroptera	Baetidae							6				
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia						4				
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena undulata						272				
Arthropoda	Insecta	Ephemeroptera	Heptageniidae							88				
Arthropoda	Insecta	Odonata	Gomphidae							4				
Arthropoda	Insecta	Plecoptera	Chloroperlidae							30				
Arthropoda	Insecta	Plecoptera	Perlidae							12				
Arthropoda	Insecta	Plecoptera	Perlodidae							8				
Arthropoda	Insecta	Plecoptera	Pteronarcyidae							2				
Arthropoda	Insecta	Trichoptera	Hydropsychidae							114				
Arthropoda	Insecta	Trichoptera	Lepidostomatidae							16				
Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon						20				
Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium						144				
Mollusca	Gastropoda	Basommatophora	Planorbidae							2				
Nemata														2
Total									1056					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
MacKenzie River (2007) 61.8397 N 121.0922 W	MACK470	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		21
					Annelida	Clitellata	Haplotaxida	Tubificidae		2
					Arthropoda	Branchiopoda	Cladocera			5
					Arthropoda	Insecta	Coleoptera	Dytiscidae	Oreodytes	1
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	10
					Arthropoda	Insecta	Coleoptera	Elmidae		6
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	2
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	3
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	27
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	6
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	11
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	8
					Arthropoda	Insecta	Diptera	Chironomidae	Potthastia longimana group	44
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	1
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	18
					Arthropoda	Insecta	Diptera	Dolichopodidae		1
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	3
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	2
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	13
					Arthropoda	Insecta	Ephemeroptera	Leptohyphidae	Tricorythodes	1
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Leptophlebia	5
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	15
					Arthropoda	Insecta	Heteroptera	Corixidae		34
					Arthropoda	Insecta	Plecoptera	Capniidae		60
					Arthropoda	Insecta	Plecoptera	Perlodidae	Diura	6
					Arthropoda	Insecta	Trichoptera	Apataniidae	Apatania	2
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	1
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	16
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Hydroptila	5
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	2
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	1
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Ceraclea	8

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Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
MacKenzie River (2007)	MACK470	Kicknet	1	Ref-Pipe	Arthropoda	Insecta	Trichoptera	Limnephilidae	Frenesia	1
61.8397 N 121.0922 W					Arthropoda	Insecta	Trichoptera	Philopotamidae	Chimarra	1
					Arthropoda	Insecta	Trichoptera	Polycentropodidae	Neureclipsis	1
FROM PREVIOUS					Arthropoda	Insecta	Trichoptera			9
					Arthropoda	Malacostraca	Amphipoda	Hyaletellidae	Hyaletella	5
					Arthropoda	Malacostraca	Ostracoda			35
					Arthropoda	Maxillipoda	Cyclopoida			3
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	34
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	9
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	3
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae	Torrenticola	13
					Chelicerata	Arachnida	Prostigmata			3
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Musculium	7
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	43
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	236
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	61
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	15
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata tricarinata	5
					Nemata					67
									Total	891

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Martin River (2006) 61.8825 N 121.6167 W	MART1	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		105
					Annelida	Clitellata	Rhynchobdellida	Hirudinidae		1
					Arthropoda	Insecta	Coleoptera	Elmidae		27
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	16
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	8
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	20
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	2
					Arthropoda	Insecta	Diptera	Chironomidae		18
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	1
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	2
					Arthropoda	Insecta	Diptera	Tipulidae	Limonia	4
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	290
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	11
					Arthropoda	Insecta	Ephemeroptera	Baetiscidae	Baetisca	1
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	2
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	18
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	1
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	1
					Arthropoda	Insecta	Heteroptera	Corixidae	Corisella	2
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	5
					Arthropoda	Insecta	Plecoptera	Perlidae		2
					Arthropoda	Insecta	Plecoptera	Perlodidae	Arcynopteryx	1
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	3
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	1
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	3
					Arthropoda	Insecta	Trichoptera	Hydroptilidae		1
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	210
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Mystacides	1
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Trienodes	1
					Arthropoda	Insecta	Trichoptera	Polycentropodidae	Neureclipsis bimaculata	1
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		16
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		10
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae		22
					Mollusca	Gastropoda	Basommatophora	Ancylidae		9
					Mollusca	Gastropoda	Heterostropha	Valvatidae	Valvata sincera	3
					Mollusca	Gastropoda	Neotaenioglossa	Hydrobiidae		1
Total									820	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Nadia Creek (2007) 61.8611 N 121.1817 W	NADI468	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Lumbricidae		4
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		8
					Annelida	Clitellata	Rhynchobdellida	Glossiphoniidae		1
					Annelida	Oligochaeta				8
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	85
					Arthropoda	Insecta	Coleoptera	Elmidae		89
					Arthropoda	Insecta	Diptera	Chironomidae	Chaetocladius	1
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	14
					Arthropoda	Insecta	Diptera	Chironomidae	Eukiefferiella	245
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhopsis	85
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	60
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	45
					Arthropoda	Insecta	Diptera	Chironomidae	Tvetenia	2
					Arthropoda	Insecta	Diptera	Chironomidae		20
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	38
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	8
					Arthropoda	Insecta	Diptera	Simuliidae	Prosimulium	2
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	13
					Arthropoda	Insecta	Diptera	Simuliidae		1
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	5
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	2
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	19
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis tricaudatus	17
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	22
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	18
					Arthropoda	Insecta	Odonata	Corduliidae	Somatochlora	2
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	324
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	40
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	8
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	121
					Arthropoda	Insecta	Trichoptera			1
					Chelicerata	Arachnida	Oribatei	Hydrozetidae		2
					Chelicerata	Arachnida	Prostigmata	Hydryphantidae		8
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	8
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	4
					Chelicerata	Arachnida	Prostigmata			1
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	5
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	1
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	3
					Mollusca	Gastropoda	Basommatophora	Planorbidae		2
					Mollusca	Gastropoda	Heterostroph	Valvatidae	Valvata sincera	1
					Nemata					4
Total									1347	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts				
Noell Creek (2006) 68.5795 N 133.5893 W	NOEL1	Kicknet	1	Ref-Future	Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	110				
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladiinae	38				
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladus	10				
					Arthropoda	Insecta	Diptera	Chironomidae	Potthastia	24				
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsini	190				
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	20				
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	12				
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	2				
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	2				
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	10				
					Arthropoda	Insecta	Plecoptera	Nemouridae		34				
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	32				
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	92				
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	2				
					Arthropoda	Insecta	Trichoptera	Rhyacophilidae	Rhyacophila	2				
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		2				
					Chelicerata	Arachnida	Prostigmata	Sperchionidae		20				
					Mollusca	Gastropoda	Heterostropha	Valvatidae	Valvata sincera	14				
					Nemata					12				
					Total									628
North Nahanni River (2007) 62.0711 N 123.7244 W	NNAH1	Kicknet	1	Ref-Future	Annelida	Oligochaeta				2				
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomysia	1				
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	7				
					Arthropoda	Insecta	Diptera	Chironomidae	Phaenopsectra	8				
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	1				
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsini	1				
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	2				
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	3				
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	1				
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		4				
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae		1				
					Arthropoda	Insecta	Plecoptera	Capniidae		85				
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		1				
					Arthropoda	Insecta	Plecoptera			11				
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	1				
					Total									129

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Nota Creek (2005) 65.0900 N 126.0950 W	NOTA324	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		50
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	2
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	46
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	116
					Arthropoda	Insecta	Diptera	Chironomidae	Djalmabatista	1
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	92
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	16
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	8
					Arthropoda	Insecta	Diptera	Chironomidae		23
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	43
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	17
					Arthropoda	Insecta	Diptera	Tipulidae		7
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	1
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	2
					Arthropoda	Insecta	Ephemeroptera	Baetidae		2
					Arthropoda	Insecta	Plecoptera	Nemouridae		2
					Arthropoda	Insecta	Plecoptera	Perlodidae		3
					Arthropoda	Insecta	Trichoptera	Brachycentridae		13
					Arthropoda	Insecta	Trichoptera	Hydroptilidae		5
					Arthropoda	Malacostraca	Ostracoda			2
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	42
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	47
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	14
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	16
					Nemata					6
								Total		576

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Ochre River (2007) 63.4864 N 123.6239 W	OCHR391	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		1
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	6
					Arthropoda	Insecta	Diptera	Chironomidae	Parakiefferiella	9
					Arthropoda	Insecta	Diptera	Chironomidae	Robackia	3
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	4
					Arthropoda	Insecta	Diptera	Empididae		1
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	1
					Arthropoda	Insecta	Diptera	Tipulidae	Rhabdomastix	1
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	13
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	3
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	1
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	2
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	412
					Arthropoda	Insecta	Plecoptera	Capniidae		34
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	3
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Sweltsa	6
					Arthropoda	Insecta	Plecoptera	Perlidae		1
					Arthropoda	Insecta	Plecoptera	Perlidae	Isogenoides	3
					Arthropoda	Insecta	Plecoptera	Perlidae	Skwala	3
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	2
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	4
					Nemata					1
								Total		514

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Oscar Creek (2005) 65.4389 N 127.4389 W	OSCA292	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		39
					Annelida	Clitellata	Lumbriculida	Lumbriculidae	Rhynchelmis	2
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		13
					Arthropoda	Branchiopoda	Cladocera			1
					Arthropoda	Insecta	Diptera	Chironomidae	Constempellina	5
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	6
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	32
					Arthropoda	Insecta	Diptera	Chironomidae	Rheosmittia	116
					Arthropoda	Insecta	Diptera	Chironomidae	Stictochironomus	2
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	7
					Arthropoda	Insecta	Diptera	Psychodidae	Pericoma	1
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	8
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	5
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	5
					Arthropoda	Insecta	Ephemeroptera	Ameletidae		1
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	2
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis flavistriga	1
					Arthropoda	Insecta	Ephemeroptera	Baetidae		1
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae		12
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		58
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae		9
					Arthropoda	Insecta	Plecoptera	Capniidae		7
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		7
					Arthropoda	Insecta	Plecoptera	Nemouridae		3
					Arthropoda	Insecta	Plecoptera	Perlodidae		20
					Arthropoda	Insecta	Plecoptera	Pteronarcyidae		1
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae		12
					Arthropoda	Insecta	Trichoptera	Glossosomatidae		1
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		4
					Arthropoda	Malacostraca	Amphipoda	Gammaridae	Gammarus lacustris	1
					Arthropoda	Maxillipoda	Cyclopoida			3
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	5
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	9
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	1
								Total		400

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Peekaya Creek (2007) 62.7128 N 123.0317 W	PEEK1	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		63
					Annelida	Clitellata	Rhynchobdellida	Glossiphoniidae		5
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	147
					Arthropoda	Insecta	Coleoptera	Elmidae		158
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomys	5
					Arthropoda	Insecta	Diptera	Chironomidae	Limnophyes	26
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	37
					Arthropoda	Insecta	Diptera	Chironomidae	Parametrioctenus	16
					Arthropoda	Insecta	Diptera	Chironomidae	Potthastia longimana group	11
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	200
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	58
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	16
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	137
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	37
					Arthropoda	Insecta	Diptera	Empididae		5
					Arthropoda	Insecta	Diptera	Tabanidae	Tabanus	5
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	5
					Arthropoda	Insecta	Diptera	Tipulidae	Limnophila	5
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	16
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	5
					Arthropoda	Insecta	Plecoptera	Capniidae		168
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	37
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	32
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	5
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	37
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	21
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Arctopsyche	5
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	5
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		5
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	142

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Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Peekaya Creek (2007) 62.7128 N 123.0317 W	PEEK1	Kicknet	1	Ref-Future	Arthropoda	Insecta	Trichoptera	Leptoceridae	Mystacides	16
					Arthropoda	Insecta	Trichoptera	Leptoceridae		37
					Arthropoda	Insecta	Trichoptera	Limnephilidae		16
					Arthropoda	Insecta	Trichoptera			21
					Arthropoda	Malacostraca	Ostracoda			58
					Chelicerata	Arachnida	Prostigmata	Hydryphantidae	Protzia	5
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	174
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	58
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	5
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchonopsis	5
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	211
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	90
					Mollusca	Gastropoda	Heterostroph	Valvatidae	Valvata sincera	53
					Nemata					5
								Total		2168
Petitot River (2006) 59.5011 N 119.9367 W	PETIAB22	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		80
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	80
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	800
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	1200
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsini	1200
					Arthropoda	Insecta	Diptera	Chironomidae		320
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	16
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	112
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	48
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	16
					Arthropoda	Insecta	Ephemeroptera	Caenidae	Caenis amica	16
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		48
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Leptophlebia	112
					Arthropoda	Insecta	Heteroptera	Corixidae		16
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	32
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	16
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		16
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	32
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		16
								Total		4176

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Poplar River (2006) 61.3140 N 121.7293 W	POPL1	Kicknet	1	Ref-Future	Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	4
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	20
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	32
					Arthropoda	Insecta	Diptera	Chironomidae	Pseudosmittia	4
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsini	240
					Arthropoda	Insecta	Diptera	Chironomidae		30
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	4
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	12
					Arthropoda	Insecta	Diptera	Tipulidae	Antocha	2
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	24
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	16
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Eurytrophella	8
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Ecdyonurus	2
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	8
					Arthropoda	Insecta	Odonata	Gomphidae	Ophiogomphus	8
					Arthropoda	Insecta	Plecoptera	Perlodidae	Arcynopteryx	10
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	4
					Arthropoda	Insecta	Plecoptera	Perlodidae		8
					Arthropoda	Insecta	Plecoptera	Pteronarcyidae	Pteronarcys	12
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae	Taeniopteryx	2
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	6
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	116
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	2
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	66
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Ceraclea	2
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		12
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		42
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae		14
					Mollusca	Bivalvia	Veneroida	Pisidiidae		4
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	2
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Prohibition Creek (2005) 65.1531 N 126.3061 W	PROH313	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Lumbriculida	Lumbriculidae	Rhynchelmis	32
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	12
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	68
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	184
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	52
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	4
					Arthropoda	Insecta	Diptera	Chironomidae	Tanypodinae	4
					Arthropoda	Insecta	Diptera	Chironomidae	Tvetenia	108
					Arthropoda	Insecta	Diptera	Chironomidae		216
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	20
					Arthropoda	Insecta	Diptera	Empididae	Wiedemannia	112
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	8
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	4
					Arthropoda	Insecta	Ephemeroptera	Baetidae		84
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		4
					Arthropoda	Insecta	Plecoptera	Capniidae		316
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		4
					Arthropoda	Insecta	Plecoptera	Nemouridae		116
					Arthropoda	Insecta	Plecoptera	Perlodidae		16
					Arthropoda	Insecta	Trichoptera	Brachycentridae		64
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		16
					Arthropoda	Insecta	Trichoptera	Hydroptilidae		4
					Platyhelminthes	Turbellaria	Tricladida	Planariidae	Polycelis coronata	4
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Rabbit Skin River (2007) 61.6775 N 120.2578 W	RABB1	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		56
					Annelida	Clitellata	Haplotaxida	Tubificidae		24
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	108
					Arthropoda	Insecta	Coleoptera	Elmidae		20
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	4
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	24
					Arthropoda	Insecta	Diptera	Chironomidae	Hydrobaenus	8
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	20
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	8
					Arthropoda	Insecta	Diptera	Chironomidae		12
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	36
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	44
					Arthropoda	Insecta	Diptera	Simuliidae		8
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	36
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	12
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	12
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	64
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Procladius	88
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	148
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		8
					Arthropoda	Insecta	Ephemeroptera	Leptohyphidae	Tricorythodes	12
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Leptophlebia	160
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	364
					Arthropoda	Insecta	Ephemeroptera	Metretopodidae	Metretopus	56
					Arthropoda	Insecta	Heteroptera	Corixidae		4
					Arthropoda	Insecta	Odonata	Aeshnidae	Aeshna	4
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		56
					Arthropoda	Insecta	Plecoptera	Perlodidae	Diura	4
					Arthropoda	Insecta	Plecoptera			8
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Protophila	4
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Arctopsyche	4
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	12
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	4
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Ceraclea	4
					Arthropoda	Malacostraca	Amphipoda	Hyalellidae	Hyalella	4
					Arthropoda	Malacostraca	Ostracoda			8
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	12
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	8
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae	Torrenticola	20
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	48
					Nemata					12
Total									1548	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
River Between 2 Mtns (2007) 62.9411 N 123.16028 W	RBTM419	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		80
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	16
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomysia	2
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	25
					Arthropoda	Insecta	Diptera	Chironomidae	Eukiefferiella	43
					Arthropoda	Insecta	Diptera	Chironomidae	Microtendipes	3
					Arthropoda	Insecta	Diptera	Chironomidae	Parakiefferiella	1
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	6
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	12
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	12
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	13
					Arthropoda	Insecta	Diptera	Tipulidae	Hexatoma	1
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	2
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	44
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	7
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Dipheter hageni	4
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	59
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	27
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		19
					Arthropoda	Insecta	Heteroptera	Corixidae		1
					Arthropoda	Insecta	Plecoptera	Capniidae		2
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Sweltsa	18
					Arthropoda	Insecta	Plecoptera	Perlidae	Claassenia	1
					Arthropoda	Insecta	Plecoptera	Perlidae		2
					Arthropoda	Insecta	Plecoptera	Perlodidae	Isogenoides	1
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	4
					Arthropoda	Insecta	Plecoptera	Perlodidae		1
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	1
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Arctopsyche	3
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	10
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		2
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Hydroptilla	3
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	53

CONTINUED

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts				
River Between 2 Mtns (2007) 62.9411 N 123.16028 W	RBTM419	Kicknet	1	Ref-Pipe	Arthropoda	Insecta	Trichoptera	Leptoceridae	Mystacides	1				
					Arthropoda	Insecta	Trichoptera	Limnephilidae	Frenesia	2				
					Arthropoda	Insecta	Trichoptera	Polycentropodidae	Polycentropus	1				
					Arthropoda	Malacostraca	Ostracoda			1				
					Chelicerata	Arachnida	Prostigmata	Feltriidae	Feltria	3				
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	1				
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	28				
					Chelicerata	Arachnida	Prostigmata			2				
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	2				
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	28				
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus circumstriatus	5				
					Total									580
RPR-001 (2006) 69.3691 N 134.9238 W	RPR001	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaaxida	Tubificidae		3				
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	1				
					Arthropoda	Insecta	Diptera	Chironomidae	Chironomus	4				
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	2				
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	9				
					Arthropoda	Insecta	Diptera	Chironomidae		6				
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	0				
					Arthropoda	Malacostraca	Isopoda	Chaetiliidae		0				
					Arthropoda	Malacostraca	Mysidacea	Mysidae	Mysis	0				
					Arthropoda	Malacostraca	Ostracoda			26				
					Total									51
					RPR-005 (2007) 69.3525 N 134.8542 W	RPR005	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaaxida	Naididae	
Arthropoda	Insecta	Diptera	Chironomidae	Chironomus						1				
Arthropoda	Insecta	Diptera	Chironomidae	Demicryptochironomus						1				
Arthropoda	Insecta	Diptera	Chironomidae	Monodiamesa						5				
Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae						10				
Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum						5				
Arthropoda	Insecta	Diptera	Chironomidae	Procladius						2				
Arthropoda	Insecta	Diptera	Chironomidae	Stictochironomus						4				
Arthropoda	Malacostraca	Amphipoda	Hyalellidae	Hyalella						5				
Arthropoda	Malacostraca	Mysidacea	Mysidae	Mysis						1				
Nemata										101				
Total										161				

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-008 (2007) 69.2075 N 134.5517 W	RPR008	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		2
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		6
					Arthropoda	Branchiopoda	Cladocera			8
					Arthropoda	Insecta	Diptera	Chironomidae	Constempellina	8
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	5
					Arthropoda	Insecta	Diptera	Chironomidae	Dicrotendipes	9
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	15
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	10
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	6
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	45
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	55
					Arthropoda	Insecta	Diptera	Chironomidae	Zalutschia	13
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	5
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	1
					Arthropoda	Insecta	Plecoptera	Capniidae		1
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Micrasema	1
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Ceraclea	1
					Arthropoda	Insecta	Trichoptera	Limnephilidae	Ecclisomyia	1
					Arthropoda	Insecta	Trichoptera	Limnephilidae		2
					Arthropoda	Insecta	Trichoptera	Phryganeidae	Phryganea	1
					Arthropoda	Malacostraca	Ostracoda			165
					Arthropoda	Maxillipoda	Cyclopoida			13
					Chelicerata	Arachnida	Oribatei	Hydrozetidae		1
					Chelicerata	Arachnida	Prostigmata	Arrenuridae	Arrenurus	1
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	4
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	28
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	19
					Nemata					7
								Total		433

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-011 (2007) 69.1639 N 134.3786 W	RPR011	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		5
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomysia	1
					Arthropoda	Insecta	Diptera	Chironomidae	Chironomus	1
					Arthropoda	Insecta	Diptera	Chironomidae	Monodiamesa	13
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum aviceps	59
					Arthropoda	Insecta	Diptera	Chironomidae	Stictochironomus	10
					Arthropoda	Insecta	Diptera	Tipulidae	Limnophila	1
					Arthropoda	Malacostraca	Amphipoda	Hyaellidae	Hyaella	23
					Arthropoda	Malacostraca	Mysidacea	Mysidae	Mysis	2
					Arthropoda	Malacostraca	Ostracoda			108
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	6
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Promenetus	3
					Nemata					7
					Total					239
RPR-012 (2007) 69.1544 N 134.3564 W	RPR012	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		36
					Arthropoda	Branchiopoda	Cladocera	Daphniidae		3
					Arthropoda	Insecta	Diptera	Chironomidae	Cladopelma	1
					Arthropoda	Insecta	Diptera	Chironomidae	Cryptochironomus	4
					Arthropoda	Insecta	Diptera	Chironomidae	Dicrotendipes	5
					Arthropoda	Insecta	Diptera	Chironomidae	Endochironomus	7
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum aviceps	55
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	6
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	26
					Arthropoda	Insecta	Trichoptera	Phryganeidae	Phryganea cinerea	1
					Arthropoda	Malacostraca	Amphipoda	Hyaellidae	Hyaella	1
					Arthropoda	Malacostraca	Ostracoda			109
					Arthropoda	Maxillipoda	Copepoda			14
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	28
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Promenetus	1
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera helicoidea	5
					Mollusca	Gastropoda				1
					Nemata					7
					Total					310

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-046 (2007) 68.6267 N 133.6047 W	RPR046	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		35
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		4
					Arthropoda	Branchiopoda	Cladocera			11
					Arthropoda	Insecta	Coleoptera	Halipidae	Haliplus	2
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	5
					Arthropoda	Insecta	Diptera	Chironomidae	Cladopelma	2
					Arthropoda	Insecta	Diptera	Chironomidae	Microtendipes	43
					Arthropoda	Insecta	Diptera	Chironomidae	Paratanytarsus	2
					Arthropoda	Insecta	Diptera	Chironomidae	Phaenopsectra	25
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum aviceps	1
					Arthropoda	Insecta	Diptera	Dixidae	Dixella	1
					Arthropoda	Insecta	Trichoptera	Molannidae	Molannodes	1
					Arthropoda	Insecta	Trichoptera	Phryganeidae	Agrypnia	2
					Arthropoda	Malacostraca	Ostracoda			24
					Arthropoda	Maxillipoda	Cyclopoida			6
					Chelicerata	Arachnida	Prostigmata			1
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	25
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	1
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	2
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	7
					Nemata					43
					Platyhelminthes	Turbellaria	Tricladida	Planariidae	Polycelis	1
									Total	244

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-048 (2007) 68.6156 N 133.5647 W	RPR048	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaixida	Tubificidae		2
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		2
					Arthropoda	Branchiopoda	Cladocera	Daphniidae		1
					Arthropoda	Insecta	Coleoptera	Dytiscidae	Ilybius	1
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	8
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	6
					Arthropoda	Insecta	Diptera	Chironomidae	Cryptochironomus	2
					Arthropoda	Insecta	Diptera	Chironomidae	Dicrotendipes	7
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	20
					Arthropoda	Insecta	Diptera	Chironomidae	Paracladopelma	1
					Arthropoda	Insecta	Diptera	Chironomidae	Potthastia longimana group	1
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	5
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	10
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Micrasema	1
					Arthropoda	Malacostraca	Ostracoda			7
					Arthropoda	Maxillipoda	Cyclopoida			6
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	2
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	8
					Chelicerata	Arachnida	Prostigmata			6
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	2
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	5
					Mollusca	Gastropoda	Heterostroph	Valvatidae	Valvata sincera	3
					Nemata					15
					Total					
RPR-059 (2007) 68.4169 N 133.2497 W	RPR059	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaixida	Tubificidae		6
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		2
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	3
					Arthropoda	Insecta	Diptera	Chironomidae	Ablabesmyia(Karelia)	6
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	3
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	35
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	11
					Arthropoda	Insecta	Diptera	Chironomidae	Psectrocladius	59
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	5
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	95
					Arthropoda	Malacostraca	Ostracoda			6
					Arthropoda	Maxillipoda	Cyclopoida			9
					Nemata					2
Total									242	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-065 (2007) 68.3222 N 133.1619 W	RPR065	Ponar	1	Ref-Pipe	Annelida	Oligochaeta				3
					Arthropoda	Branchiopoda	Cladocera	Daphniidae		809
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	1
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	1
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	1
					Arthropoda	Insecta	Diptera	Dixidae	Dixella	12
					Arthropoda	Insecta	Odonata	Aeshnidae	Aeshna	1
					Arthropoda	Insecta	Odonata	Coenagrionidae		1
					Arthropoda	Malacostraca	Ostracoda			30
					Arthropoda	Maxillipoda	Cyclopoida			207
					Chelicerata	Arachnida	Prostigmata			1
					Nemata					5
					Total					1072
RPR-069 (2007) 68.1958 N 133.0439 W	RPR069	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		3
					Arthropoda	Insecta	Diptera	Chironomidae	Ablabesmyia(Karelia)	4
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	1
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladus	2
					Arthropoda	Insecta	Diptera	Chironomidae	Paralauterborniella	2
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedium	1
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	3
					Arthropoda	Insecta	Diptera	Chironomidae	Stenochironomus	1
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	1
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		1
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	7
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	1
					Total					28

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-070 (2005)	RPR070	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		344
68.1639 N 132.9839 W					Arthropoda	Insecta	Diptera	Chironomidae	Constempellina	156
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	84
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	20
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadius(Symposiocladius) lignicola	4
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	4376
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	208
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	4
					Arthropoda	Insecta	Diptera	Empididae	Wiedemannia	4
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	112
					Arthropoda	Insecta	Diptera	Stratiomyidae		4
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella dorothea	40
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Cinygmula	4
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		68
					Arthropoda	Insecta	Plecoptera	Nemouridae		228
					Arthropoda	Insecta	Trichoptera	Brachycentridae		144
					Arthropoda	Insecta	Trichoptera	Glossosomatidae		8
					Arthropoda	Insecta	Trichoptera	Hydroptilidae		12
					Arthropoda	Insecta	Trichoptera	Rhyacophilidae		44
					Arthropoda	Malacostraca	Ostracoda			52
					Arthropoda	Maxillipoda	Cyclopoida			4
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	52
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	160
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	288
					Nemata					108
									Total	6528

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts	
RPR-075 (2005)	RPR075	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		392	
68.0944 N 132.8339 W					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	439	
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	1192	
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	8	
					Arthropoda	Insecta	Diptera	Chironomidae	Clinotanypus	262	
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	169	
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	15	
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	23	
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	15	
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella insignificans	8	
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	39	
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis tricaudatus	131	
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		62	
					Arthropoda	Insecta	Plecoptera	Nemouridae		15	
					Arthropoda	Insecta	Plecoptera	Perlodidae		615	
					Arthropoda	Insecta	Trichoptera	Brachycentridae		15	
					Arthropoda	Insecta	Trichoptera	Glossosomatidae		8	
					Arthropoda	Insecta	Trichoptera	Leptoceridae		215	
					Arthropoda	Malacostraca	Ostracoda			23	
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	285	
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	292	
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	54	
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	369	
					Nemata						
										Total	4646

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-075 (2007) 68.0939 N 132.8339 W	RPR075	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		33
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomysia	17
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	4050
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	217
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	67
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	133
					Arthropoda	Insecta	Diptera	Simuliidae		117
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	33
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	117
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	33
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	600
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	50
					Arthropoda	Insecta	Trichoptera	Rhyacophilidae	Rhyacophila	17
					Arthropoda	Malacostraca	Ostracoda			183
					Chelicerata	Arachnida	Oribatei	Hydrozetidae		33
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	1033
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	467
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	17
					Nemata					350
								Total		7567
RPR-099 (2007) 67.8692 N 132.0483 W	RPR099	Ponar	1	Ref-Pipe	Annelida	Clitellata	Rhynchobdellida	Glossiphoniidae		4
					Arthropoda	Branchiopoda	Cladocera			6
					Arthropoda	Insecta	Diptera	Chironomidae	Cryptochironomus	4
					Arthropoda	Insecta	Diptera	Chironomidae	Dicrotendipes	4
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	10
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	378
					Arthropoda	Malacostraca	Ostracoda			2
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	2
					Nemata					8
								Total		418

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-117 (2005) 67.6600 N 131.4719 W	RPR117	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaenia	Naididae		237
					Arthropoda	Branchiopoda	Cladocera			32
					Arthropoda	Insecta	Diptera	Ceratopogonidae		5
					Arthropoda	Insecta	Diptera	Chironomidae	Chaetocladius	68
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	226
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	42
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	426
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	247
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	100
					Arthropoda	Insecta	Diptera	Empididae		79
					Arthropoda	Insecta	Diptera	Simuliidae		26
					Arthropoda	Insecta	Diptera	Tipulidae		5
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella insignificans	5
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	5
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis tricaudatus	42
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		247
					Arthropoda	Insecta	Plecoptera	Nemouridae		47
					Arthropoda	Insecta	Trichoptera	Brachycentridae		137
					Arthropoda	Insecta	Trichoptera	Glossosomatidae		11
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae		5
					Arthropoda	Insecta	Trichoptera	Leptoceridae		5
					Arthropoda	Insecta	Trichoptera	Rhyacophilidae		21
					Arthropoda	Malacostraca	Ostracoda			284
					Chelicerata	Arachnida	Oribatei	Hydrozetidae	Hydrozetes	47
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	95
					Mollusca	Gastropoda	Basommatophora	Planorbidae		32
					Nemata					316
					Total					2795

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-271 (2005) 65.7089 N 127.8889 W	RPR271	Kicknet	1	Test	Annelida	Clitellata	Haplotaxida	Naididae		1
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Culicoides	8
					Arthropoda	Insecta	Diptera	Ceratopogonidae		1
					Arthropoda	Insecta	Diptera	Chironomidae	Brillia	11
					Arthropoda	Insecta	Diptera	Chironomidae	Dicrotendipes	1
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra/Tanytarsus	2
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladiinae	5
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	2
					Arthropoda	Insecta	Diptera	Chironomidae		5
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	6
					Arthropoda	Insecta	Diptera	Empididae		1
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	3
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	1
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	33
					Arthropoda	Insecta	Ephemeroptera	Baetidae		9
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena undulata	1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		1
					Arthropoda	Insecta	Plecoptera	Capniidae		18
					Arthropoda	Insecta	Plecoptera	Nemouridae		236
					Arthropoda	Insecta	Plecoptera	Perlodidae		1
					Arthropoda	Insecta	Trichoptera	Brachycentridae		5
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae		3
					Arthropoda	Insecta	Trichoptera	Polycentropodidae		1
					Arthropoda	Insecta	Trichoptera	Rhyacophilidae		23
					Arthropoda	Malacostraca	Ostracoda			1
					Chelicerata	Arachnida	Oribatei	Hydrozetidae	Hydrozetes	2
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	9
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-403 (2007) 63.2681 N 123.4306 W	RPR403	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		1
					Annelida	Clitellata	Haplotaxida	Tubificidae		3
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	26
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	3
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	15
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	1
					Arthropoda	Insecta	Diptera	Chironomidae	Limnophyes	4
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladiinae	20
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	1
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	13
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	3
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	68
					Arthropoda	Insecta	Diptera	Empididae	Oreogeton	25
					Arthropoda	Insecta	Diptera	Empididae		1
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	3
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	1
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	8
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	12
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	157
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	5
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		37
					Arthropoda	Insecta	Plecoptera	Capniidae		273
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		1
					Arthropoda	Insecta	Plecoptera	Nemouridae	Zapada	12
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	1
					Arthropoda	Insecta	Plecoptera	Perlodidae		1
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	7
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Arctopsyche	1
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	2
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		8
					Arthropoda	Insecta	Trichoptera	Limnephilidae	Eocosmoecus	1
					Arthropoda	Insecta	Trichoptera	Limnephilidae		4
					Arthropoda	Insecta	Trichoptera			1
					Chelicerata	Arachnida	Oribatei	Hydrozetidae		1
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	2
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	2
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	1
					Nemata					1
Total									726	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-403 (2007) 63.2681 N 123.4306 W	RPR403	Kicknet	2	Ref-Pipe	Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	2
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	8
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	72
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	2
					Arthropoda	Insecta	Diptera	Chironomidae	Paracladopelma	2
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	60
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemanniella	2
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	4
					Arthropoda	Insecta	Diptera	Chironomidae		4
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	18
					Arthropoda	Insecta	Diptera	Empididae	Oreogeton	2
					Arthropoda	Insecta	Diptera	Simuliidae	Prosimulium	2
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	10
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	6
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	2
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	22
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		12
					Arthropoda	Insecta	Plecoptera	Capniidae		344
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		26
					Arthropoda	Insecta	Plecoptera	Perlodidae	Isoperla	2
					Arthropoda	Insecta	Trichoptera	Limnephilidae	Homophylax	22
					Arthropoda	Insecta	Trichoptera	Limnephilidae		2
					Arthropoda	Malacostraca	Ostracoda			2
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	2
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	2
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-403 (2007) 63.2681 N 123.4306 W	RPR403	Kicknet	3	Ref-Pipe	Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	32
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	28
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	6
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	12
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	2
					Arthropoda	Insecta	Diptera	Chironomidae	Tvetenia	2
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	12
					Arthropoda	Insecta	Diptera	Empididae	Oreogeton	22
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	6
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	2
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	4
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	2
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	248
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		74
					Arthropoda	Insecta	Plecoptera	Capniidae		276
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		6
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	10
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	4
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		8
					Arthropoda	Insecta	Trichoptera	Limnephilidae	Homophylax	2
					Arthropoda	Insecta	Trichoptera	Limnephilidae		18
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	2
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	2

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
RPR-481 (2007) 60.8797 N 120.5133 W	RPR481	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		25
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	17
					Arthropoda	Insecta	Coleoptera	Elmidae		50
					Arthropoda	Insecta	Diptera	Chironomidae	Eukiefferiella	4
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhapsis	2
					Arthropoda	Insecta	Diptera	Chironomidae	Krenosmittia	1
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	4
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	71
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	7
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemanniella	3
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	31
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	4
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	6
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	1
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	16
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis tricaudatus	17
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	2
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	11
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae		1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	164
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		12
					Arthropoda	Insecta	Plecoptera	Capniidae		67
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		6
					Arthropoda	Insecta	Plecoptera	Nemouridae	Zapada cinctipes	11
					Arthropoda	Insecta	Plecoptera	Nemouridae		126
					Arthropoda	Insecta	Plecoptera	Perlodidae	Diura	3
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	4
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	2
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	3
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	18
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		3
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	6
					Arthropoda	Insecta	Trichoptera			4
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	10
					Chelicerata	Arachnida	Prostigmata	Lebertidae	Lebertia	32
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	1
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	2
					Nemata					24
								Total		771

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Saline Creek (2006) 64.2913 N 124.5048 W	SALIN358	Kicknet	1	Ref-Pipe	Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	1
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	2
					Arthropoda	Insecta	Diptera	Chironomidae	Krenosmittia	1
					Arthropoda	Insecta	Diptera	Chironomidae		5
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	3
					Arthropoda	Insecta	Diptera	Empididae	Wiedemannia	5
					Arthropoda	Insecta	Plecoptera	Capniidae		76
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Sweltsa	14
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	4
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae		1
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	1
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Arctopsyche	5
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	28
					Arthropoda	Malacostraca	Ostracoda			1
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		1
					Total					148
Sandy Creek (2006) 67.8416 N 132.1305 W	SAND1	Kicknet	1	Ref-Future	Annelida	Citellata	Haplctaxida	Tubificidae		234
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	479
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhapsis	149
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	426
					Arthropoda	Insecta	Diptera	Chironomidae		692
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	32
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	43
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	170
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	64
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	362
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	106
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	32
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	340
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	43
					Arthropoda	Malacostraca	Ostracoda			234
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		128
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		266
					Cnidaria	Hydrozoa	Hydroida	Hydridae	Hydra	11
					Mollusca	Bivalvia	Veneroida	Pisidiidae		85
					Mollusca	Gastropoda	Heterostrophæ	Valvatidae	Valvata sincera	43
					Total					3936

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Smith Creek (2007) 63.1828 N 123.3053 W	SMIT410	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		5
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		2
					Arthropoda	Insecta	Coleoptera	Elmidae		1
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomysia	90
					Arthropoda	Insecta	Diptera	Chironomidae	Cladopelma	1
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	38
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	8
					Arthropoda	Insecta	Diptera	Chironomidae	Parakiefferiella	27
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	62
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	34
					Arthropoda	Insecta	Diptera	Simuliidae	Prosimulium	2
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	12
					Arthropoda	Insecta	Diptera	Simuliidae		1
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	6
					Arthropoda	Insecta	Diptera	Tipulidae	Hexatoma	1
					Arthropoda	Insecta	Diptera	Tipulidae	Molophilus	1
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	65
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	1
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	4
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	6
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		27
					Arthropoda	Insecta	Plecoptera	Capniidae		19
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		3
					Arthropoda	Insecta	Plecoptera	Nemouridae		27
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	4
					Arthropoda	Insecta	Plecoptera			7
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		3
					Arthropoda	Insecta	Trichoptera	Limnephilidae	Ecclisomyia	1
					Arthropoda	Malacostraca	Ostracoda			4
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	6
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	2
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	6
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	3
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
South Snafu Creek (2005) 65.9869 N 128.3181 W	SNAF261	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		29
					Annelida	Clitellata	Rhynchobdellida	Hirudinidae		3
					Arthropoda	Insecta	Diptera	Chironomidae	Constempellina	32
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	29
					Arthropoda	Insecta	Diptera	Chironomidae	Dicrotendipes	3
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	265
					Arthropoda	Insecta	Diptera	Chironomidae	Tvetenia	16
					Arthropoda	Insecta	Diptera	Chironomidae		29
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	3
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	26
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	3
					Arthropoda	Insecta	Ephemeroptera	Ameletidae		3
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella insignificans	10
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	3
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis tricaudatus	3
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	3
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	19
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		3
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		23
					Arthropoda	Insecta	Plecoptera	Nemouridae		407
					Arthropoda	Insecta	Plecoptera	Perlidae		6
					Arthropoda	Insecta	Trichoptera	Polycentropodidae		10
					Arthropoda	Insecta	Trichoptera	Rhyacophilidae		39
					Arthropoda	Insecta	Trichoptera			13
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	3
					Mollusca	Gastropoda	Heterostropha	Valvatidae		3
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Stanley Creek (2006) 68.7077 N 133.4478 W	STAN1	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		160
					Annelida	Clitellata	Haplotaxida	Tubificidae		423
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	134
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhapsis	112
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladus	401
					Arthropoda	Insecta	Diptera	Chironomidae	Potthastia	11
					Arthropoda	Insecta	Diptera	Chironomidae	Pseudokiefferiella	11
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsini	187
					Arthropoda	Insecta	Diptera	Chironomidae		396
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	27
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	59
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	546
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	5
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	262
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	16
					Arthropoda	Malacostraca	Ostracoda			86
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		150
					Mollusca	Bivalvia	Veneroida	Pisidiidae		5
					Mollusca	Gastropoda	Heterostropha	Valvatidae	Valvata sincera	5
					Nemata					43
									Total	3037

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Steep Creek (2006) 64.1854 N 124.3641 W	STEEP371	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Lumbriculida	Lumbriculidae	Rhynchelmis	131
					Arthropoda	Insecta	Diptera	Chironomidae	Diamesa	20
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	195
					Arthropoda	Insecta	Diptera	Chironomidae		54
					Arthropoda	Insecta	Diptera	Empididae	Oreogeton	3
					Arthropoda	Insecta	Diptera	Muscidae	Limnophora	12
					Arthropoda	Insecta	Diptera			5
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Epeorus	17
					Arthropoda	Insecta	Plecoptera	Capniidae		47
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	180
					Arthropoda	Insecta	Plecoptera	Nemouridae	Zapada	7
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae	Taenionema	261
					Platyhelminthes	Turbellaria	Tricladida	Planariidae	Polycelis coronata	52
										Total
Thinantea Creek (2006) 59.8970 N 119.9686 W	THINAB07	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		32
					Arthropoda	Branchiopoda	Cladocera			353
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	32
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	128
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	1122
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	321
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsini	6731
					Arthropoda	Insecta	Diptera	Chironomidae		801
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	224
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Leptophlebia	353
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	64
					Arthropoda	Insecta	Heteroptera	Corixidae		32
					Arthropoda	Insecta	Odonata	Coenagrionidae		32
					Arthropoda	Insecta	Plecoptera	Capniidae		32
					Arthropoda	Malacostraca	Amphipoda	Hyalellidae	Hyalella azteca	32
					Arthropoda	Malacostraca	Ostracoda			32
					Arthropoda	Maxillipoda	Harpacticoida			128
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		64
					Nemata					64
										Total

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Thunder River (2005) 67.5350 N 130.8489 W	THUN141	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		4
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	4
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	412
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	580
					Arthropoda	Insecta	Diptera	Chironomidae	Krenosmittia	24
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra/Tanytarsus	268
					Arthropoda	Insecta	Diptera	Chironomidae		248
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	24
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	96
					Arthropoda	Insecta	Diptera	Tipuidae	Dicranota	4
					Arthropoda	Insecta	Ephemeroptera	Ameletidae		4
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	12
					Arthropoda	Insecta	Ephemeroptera	Baetidae		8
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Cinygmula	4
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	32
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		196
					Arthropoda	Insecta	Plecoptera	Nemouridae		284
					Arthropoda	Insecta	Plecoptera	Perlodidae		40
					Arthropoda	Insecta	Trichoptera	Brachycentridae		52
					Arthropoda	Insecta	Trichoptera	Glossosomatidae		8
					Arthropoda	Malacostraca	Ostracoda			8
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	92
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	48
					Chelicerata	Arachnida	Prostigmata			4
					Nemata					4
Total									2480	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Tieda River (2005) 66.6669 N 129.2889 W	TIED221	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		51
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		5
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	67
					Arthropoda	Insecta	Diptera	Chironomidae	Constempellina	5
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhapsis	7
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	34
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	17
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	12
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	47
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella turbida	8
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis flavistriga	1
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis tricaudatus	5
					Arthropoda	Insecta	Ephemeroptera	Baetidae		1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		1
					Arthropoda	Insecta	Plecoptera	Capniidae		1
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		20
					Arthropoda	Insecta	Plecoptera	Nemouridae		17
					Arthropoda	Insecta	Trichoptera	Brachycentridae		54
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		5
					Arthropoda	Insecta	Trichoptera	Rhyacophilidae		1
					Arthropoda	Malacostraca	Ostracoda			2
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	2
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	62
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	2
					Mollusca	Gastropoda				2
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Travaillant River (2005) 67.9150 N 132.2011 W	TRAV097	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		222
					Annelida	Clitellata	Haplotaxida	Tubificidae		44
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		78
					Arthropoda	Insecta	Diptera	Chironomidae	Dicrotendipes	22
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	2333
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	344
					Arthropoda	Insecta	Diptera	Empididae		22
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	89
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	11
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis tricaudatus	11
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae		78
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	44
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	11
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		289
					Arthropoda	Insecta	Plecoptera	Nemouridae		278
					Arthropoda	Insecta	Plecoptera	Perlodidae		11
					Arthropoda	Insecta	Trichoptera	Brachycentridae		1000
					Arthropoda	Insecta	Trichoptera	Glossosomatidae		56
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		11
					Arthropoda	Insecta	Trichoptera	Hydroptilidae		11
					Arthropoda	Insecta	Trichoptera	Leptoceridae		44
					Arthropoda	Insecta	Trichoptera	Polycentropodidae		11
					Arthropoda	Malacostraca	Ostracoda			67
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	233
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	289
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	33
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	67
					Nemata					200
								Total		5911
Travaillant River (2006) 67.5658 N 131.4365 W	TRAV1	Ponar	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		4
					Annelida	Clitellata	Haplotaxida	Tubificidae		11
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	32
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladiinae	59
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	1
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	73
					Arthropoda	Insecta	Diptera	Chironomidae		129
					Arthropoda	Malacostraca	Ostracoda			23
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		7
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		13
					Mollusca	Bivalvia	Veneroida	Pisidiidae		29
								Total		381

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Trout River (2008) 60.9782 N 120.5719 W	TROU479	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		2320
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia	16
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	1472
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	48
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhapsis	32
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	368
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	64
					Arthropoda	Insecta	Diptera	Chironomidae		320
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	112
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	1120
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	336
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	784
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	432
					Arthropoda	Insecta	Plecoptera	Perlidae		48
					Arthropoda	Insecta	Plecoptera	Perlodidae	Arcynopteryx	96
					Arthropoda	Insecta	Plecoptera	Perlodidae		64
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	256
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	512
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	448
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		64
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae		16
					Mollusca	Bivalvia	Veneroida	Pisidiidae		128
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Fam ¹¹	Genus and Species	No. of Inverts
Trout Lake Rd Xing 1 (2007) 61.0014 N 119.9553 W	TRRD1	Kicknet	1	Test	Annelida	Clitellata	Haplotaxida	Naididae		21
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	79
					Arthropoda	Insecta	Coleoptera	Elmidae		58
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	5
					Arthropoda	Insecta	Diptera	Chironomidae	Nilotanypus	16
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	11
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	5
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	16
					Arthropoda	Insecta	Diptera	Chironomidae	Tvetenia	11
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	16
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	21
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	11
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	37
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	5
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acerpenna	90
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	79
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	5
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	268
					Arthropoda	Insecta	Odonata	Gomphidae		11
					Arthropoda	Insecta	Plecoptera	Capniidae		32
					Arthropoda	Insecta	Plecoptera	Nemouridae	Zapada cinctipes	211
					Arthropoda	Insecta	Plecoptera	Perlidae	Claassenia	21
					Arthropoda	Insecta	Plecoptera	Perlidae		32
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	16
					Arthropoda	Insecta	Plecoptera	Perlodidae		16
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae	Taeniopteryx	5
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	395
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		142
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	105
					Arthropoda	Insecta	Trichoptera			11
					Chelicerata	Arachnida	Prostigmata	Feltriidae	Feltria	5
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	5
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae	Torrenticola	100
					Nemata					11
Total									1868	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Trout Lake Rd Xing 1 (2007) 61.0014 N 119.9553 W	TRRD1	Kicknet	2	Test	Annelida	Clitellata	Haplotaxida	Naididae		15
					Annelida	Clitellata	Haplotaxida	Tubificidae		8
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	92
					Arthropoda	Insecta	Coleoptera	Elmidae		23
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	23
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhopsis	8
					Arthropoda	Insecta	Diptera	Chironomidae	Nilotanytus	15
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	15
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	39
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	23
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	8
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	23
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	8
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	23
					Arthropoda	Insecta	Diptera	Tabanidae	Tabanus	8
					Arthropoda	Insecta	Diptera	Tipulidae	Hexatoma	8
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	177
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acerpenna	454
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	8
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	62
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	8
					Arthropoda	Insecta	Ephemeroptera	Ephemeridae	Ephemerella	15
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	177
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Maccaffertium vicarium	8
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	31
					Arthropoda	Insecta	Plecoptera	Capniidae		62
					Arthropoda	Insecta	Plecoptera	Nemouridae	Zapada cinctipes	77
					Arthropoda	Insecta	Plecoptera	Perlidae	Claassenia	15
					Arthropoda	Insecta	Plecoptera	Perlidae		15
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	15
					Arthropoda	Insecta	Plecoptera	Perlodidae		23
					Arthropoda	Insecta	Plecoptera	Pteronarcyidae	Pteronarcys	8
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae	Taeniopteryx	15
					Arthropoda	Insecta	Trichoptera	Apataniidae	Apatania	15
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	208
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Hydroptila	8
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	77

CONTINUED

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Trout Lake Rd Xing 1 (2007) 61.0014 N 119.9553 W	TRRD1	Kicknet	2	Test	Arthropoda	Insecta	Trichoptera			339
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	23
FROM PREVIOUS					Chelicerata	Arachnida	Prostigmata	Mideopsidae	Mideopsis	8
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchonopsis	8
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae	Torrenticola	123
					Chelicerata	Arachnida	Prostigmata			31
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	8
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	8
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	8
Total									2370	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Trout Lake Rd Xing 1 (2007) 61.0014 N 119.9553 W	TRRD1	Kicknet	3	Test	Annelida	Clitellata	Haplotaxida	Naididae		44
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	156
					Arthropoda	Insecta	Coleoptera	Elmidae		22
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomysia	11
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	11
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	67
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	11
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	11
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	67
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	33
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	311
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	11
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acerpenna	700
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	167
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	178
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		133
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae		89
					Arthropoda	Insecta	Plecoptera	Capniidae		67
					Arthropoda	Insecta	Plecoptera	Nemouridae	Zapada cinctipes	22
					Arthropoda	Insecta	Plecoptera	Perlidae	Claassenia	11
					Arthropoda	Insecta	Plecoptera	Perlidae		22
					Arthropoda	Insecta	Plecoptera	Perlidae	Skwala	11
					Arthropoda	Insecta	Plecoptera	Perlidae		33
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	78
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		11
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Hydroptila	22
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	100
					Arthropoda	Insecta	Trichoptera	Limnephilidae	Nemotaulius	11
					Arthropoda	Insecta	Trichoptera	Molannidae	Molanna	11
					Arthropoda	Insecta	Trichoptera			800
					Arthropoda	Malacostraca	Ostracoda			67
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	44
					Chelicerata	Arachnida	Prostigmata	Torrenicolidae	Torrenicola	78
					Chelicerata	Arachnida	Prostigmata			22
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	22
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	44
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	11
					Total					

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Trout Lake Rd Xing 2 (2007) 60.9694 N 120.0894 W	TRRD2	Kicknet	1	Test	Annelida	Clitellata	Haplotaxida	Naididae		8
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	5
					Arthropoda	Insecta	Coleoptera	Elmidae		10
					Arthropoda	Insecta	Diptera	Chironomidae	Brillia	2
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	10
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	10
					Arthropoda	Insecta	Diptera	Chironomidae	Microtendipes	3
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladinae	5
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	13
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemanniella	2
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	6
					Arthropoda	Insecta	Diptera	Chironomidae	Tvetenia	6
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	6
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	2
					Arthropoda	Insecta	Diptera	Empididae		2
					Arthropoda	Insecta	Diptera	Simuliidae		2
					Arthropoda	Insecta	Diptera	Tipulidae	Hexatoma	2
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	16
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	3
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acerpenna	6
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	57
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	14
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	27
					Arthropoda	Insecta	Plecoptera	Capniidae		3
					Arthropoda	Insecta	Plecoptera	Nemouridae	Zapada cinctipes	25
					Arthropoda	Insecta	Plecoptera	Nemouridae		3
					Arthropoda	Insecta	Plecoptera	Perlidae		10
					Arthropoda	Insecta	Plecoptera	Perlodidae	Cultus	3
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	2
					Arthropoda	Insecta	Plecoptera	Perlodidae		14
					Arthropoda	Insecta	Plecoptera	Pteronarcyidae	Pteronarcys	3
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae	Taeniopteryx	13
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	14
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	6
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Arctopsyche	2
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	65
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		25
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	6
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Ceraclea	5
					Arthropoda	Insecta	Trichoptera			25

CONTINUED

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Trout Lake Rd Xing 2 (2007) 60.9694 N 120.0894 W	TRRD2	Kicknet	1	Test	Arthropoda	Malacostraca	Ostracoda			2
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	2
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	8
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	3
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae	Torrenticola	5
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	3
					Nemata					2
					Total					
Trout Lake Rd Xing 2 (2007) 60.9694 N 120.0894 W	TRRD2	Kicknet	1	Test	Annelida	Citellata	Haplotaxida	Naididae		8
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	5
					Arthropoda	Insecta	Coleoptera	Elmidae		10
					Arthropoda	Insecta	Diptera	Chironomidae	Brillia	2
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	10
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	10
					Arthropoda	Insecta	Diptera	Chironomidae	Microtendipes	3
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladiinae	5
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	13
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemanniella	2
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	6
					Arthropoda	Insecta	Diptera	Chironomidae	Tvetenia	6
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	6
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	2
					Arthropoda	Insecta	Diptera	Empididae		2
					Arthropoda	Insecta	Diptera	Simuliidae		2
					Arthropoda	Insecta	Diptera	Tipulidae	Hexatoma	2
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	16
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	3
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acerpenna	6
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	57
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	14
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	27
					Arthropoda	Insecta	Plecoptera	Capniidae		3
					Arthropoda	Insecta	Plecoptera	Nemouridae	Zapada cinctipes	25
					CONTINUED					Arthropoda

CONTINUED

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Trout Lake Rd Xing 2 (2007) 60.9694 N 120.0894 W	TRRD2	Kicknet	1	Test	Arthropoda	Insecta	Plecoptera	Perlidae		10
					Arthropoda	Insecta	Plecoptera	Perlodidae	Cultus	3
FROM PREVIOUS					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	2
					Arthropoda	Insecta	Plecoptera	Perlodidae		14
					Arthropoda	Insecta	Plecoptera	Pteronarcyidae	Pteronarcys	3
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae	Taeniopteryx	13
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	14
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	6
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Arctopsyche	2
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	65
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		25
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	6
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Ceraclea	5
					Arthropoda	Insecta	Trichoptera			25
					Arthropoda	Malacostraca	Ostracoda			2
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	2
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	8
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	3
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae	Torrenticola	5
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	3
					Nemata					2
								Total		464
Trout Lake Rd Xing 3 (2007) 60.7336 N 120.6422 W	TRRD3	Kicknet	1	Test	Annelida	Clitellata	Haplotaxida	Tubificidae		30
					Arthropoda	Insecta	Coleoptera	Dytiscidae	Ilybius	2
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	4
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	34
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	2
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhapsis	2
					Arthropoda	Insecta	Diptera	Chironomidae	Krenosmittia	4
					Arthropoda	Insecta	Diptera	Chironomidae	Orthocladiinae	4
					Arthropoda	Insecta	Diptera	Chironomidae	Parakiefferiella	2
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedium aviceps	12
CONTINUED					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	218
					Arthropoda	Insecta	Diptera	Chironomidae	Stictochironomus	2

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Trout Lake Rd Xing 3 (2007) 60.7336 N 120.6422 W	TRRD3	Kicknet	1	Test	Arthropoda	Insecta	Diptera	Chironomidae	Thienemanniella	4
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	6
FROM PREVIOUS					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	24
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	2
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	4
					Arthropoda	Insecta	Diptera	Simuliidae		2
					Arthropoda	Insecta	Diptera	Tabanidae	Tabanus	2
					Arthropoda	Insecta	Diptera			4
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	68
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis tricaudatus	8
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	4
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	10
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	4
					Arthropoda	Insecta	Ephemeroptera	Leptohyphidae	Tricorythodes	2
					Arthropoda	Insecta	Heteroptera	Corixidae		2
					Arthropoda	Insecta	Odonata	Corduliidae		2
					Arthropoda	Insecta	Plecoptera	Capniidae		80
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	14
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		16
					Arthropoda	Insecta	Plecoptera	Nemouridae		20
					Arthropoda	Insecta	Plecoptera			74
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Micrasema	6
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	6
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	4
					Arthropoda	Malacostraca	Ostracoda			10
					Chelicerata	Arachnida	Oribatei	Hydrozetidae		6
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	20
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	96
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	4
					Chelicerata	Arachnida	Prostigmata			2
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	2
					Nemata					6
									Total	830

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Unnamed 01 (2007) 68.7778 N 133.7703 W	UNCK01	Ponar	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Tubificidae		10
					Arthropoda	Branchiopoda	Cladocera	Daphniidae		6
					Arthropoda	Insecta	Diptera	Chironomidae	Cryptochironomus	9
					Arthropoda	Insecta	Diptera	Chironomidae	Demicyptochironomus	1
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedium	76
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	23
					Arthropoda	Insecta	Diptera	Chironomidae	Psectrocladius	2
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	6
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	1
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	3
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	7
					Arthropoda	Insecta	Trichoptera	Polycentropodidae	Neureclipsis bimaculata	1
					Arthropoda	Malacostraca	Ostracoda			76
					Arthropoda	Maxillipoda	Copepoda			2
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	1
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	51
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	3
					Nemata					23
								Total		301
Unnamed 02 (2007) 68.7778 N 133.7703 W	UNCK02	Ponar	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		5
					Annelida	Clitellata	Haplotaxida	Tubificidae		10
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		3
					Arthropoda	Branchiopoda	Cladocera	Daphniidae		39
					Arthropoda	Insecta	Diptera	Chironomidae	Ablabesmyia(Karelia)	52
					Arthropoda	Insecta	Diptera	Chironomidae	Cryptochironomus	14
					Arthropoda	Insecta	Diptera	Chironomidae	Microtendipes	1
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedium aviceps	22
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	13
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	31
					Arthropoda	Insecta	Diptera	Chironomidae	Stictochironomus	1
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	1
					Arthropoda	Insecta	Odonata	Coenagrionidae		1
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	1
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Micrasema	3
					Arthropoda	Malacostraca	Ostracoda			6
					Arthropoda	Maxillipoda	Harpacticoida			11
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobatas	2
					Chelicerata	Arachnida	Prostigmata			2
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	3
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	1
					Mollusca	Gastropoda	Heterostrophia	Valvatidae	Valvata sincera	1
					Nemata					26
								Total		249

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Unnamed 03 (2007) 68.4003 N 133.3044 W	UNCK03	Ponar	1	Ref-Future	Arthropoda	Insecta	Diptera	Chironomidae	Chironomus	9
					Arthropoda	Insecta	Diptera	Chironomidae	Phaenopsectra	13
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	10
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	52
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	1
					Nemata					4
								Total		89
Unnamed 10 (2007) 67.3878 N 130.9133 W	UNCK10	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		55
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	1
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	105
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	5
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	15
					Arthropoda	Insecta	Diptera	Chironomidae	Dicrotendipes	26
					Arthropoda	Insecta	Diptera	Chironomidae	Paracladopelma	95
					Arthropoda	Insecta	Diptera	Chironomidae	Potthastia longimana group	21
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsini	20
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemanniella	37
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	8
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	58
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	2
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	25
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	1
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	2
					Arthropoda	Insecta	Plecoptera	Nemouridae		20
					Arthropoda	Insecta	Plecoptera	Perlodidae	Diura	1
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	6
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	29
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Ceraclea	3
					Arthropoda	Insecta	Trichoptera	Leptoceridae		3
					Arthropoda	Maxillipoda	Cyclopoida			1
					Chelicerata	Arachnida	Prostigmata	Hydriphantidae		175
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	28
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	31
					Nemata					6
								Total		779

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Unnamed 16 (2007) 68.0517 N 133.4186 W	UNCK16	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaxida	Naididae		28
					Arthropoda	Insecta	Diptera	Chironomidae	Cladotanytarsus	2
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	1
					Arthropoda	Insecta	Diptera	Chironomidae	Parakiefferiella	6
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum aviceps	2
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	5
					Arthropoda	Insecta	Diptera	Chironomidae	Stenochironomus	1
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	4
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	3
					Arthropoda	Insecta	Diptera	Simuliidae		1
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	70
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	7
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	1
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	19
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	6
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		1
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	1
					Arthropoda	Insecta	Plecoptera	Nemouridae		4
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	4
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	30
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Oecetis	1
					Arthropoda	Insecta	Trichoptera	Limnephilidae		2
					Arthropoda	Malacostraca	Ostracoda			16
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	2
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	5
					Chelicerata	Arachnida	Prostigmata			3
					Nemata					3
Total									228	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Unnamed 41 (2007) 62.6017 N 122.8417 W	UNCK41	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaaxida	Naididae		125
					Annelida	Clitellata	Haplotaaxida	Tubificidae		13
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	125
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	1394
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	156
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	56
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	56
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	31
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	69
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	6
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	19
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae		6
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	44
					Arthropoda	Insecta	Heteroptera	Corixidae		13
					Arthropoda	Insecta	Plecoptera	Capniidae		19
					Arthropoda	Insecta	Plecoptera	Nemouridae		81
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	6
					Arthropoda	Insecta	Trichoptera	Apataniidae	Apatania	13
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	13
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	6
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		19
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Oxyethira	6
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae	Lepidostoma	19
					Arthropoda	Insecta	Trichoptera			6
					Arthropoda	Malacostraca	Ostracoda			6
					Chelicerata	Arachnida	Prostigmata	Hydryphantidae	Protzia	6
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	19
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	63
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	25
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchonopsis	25
					Chelicerata	Arachnida	Prostigmata			6
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	38
								Total		2489

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Unnamed 4A (2007) 62.1806 N 122.4025 W	UNCK4A	Kicknet	1	Test	Annelida	Clitellata	Haplotaaxida	Naididae		31
					Annelida	Clitellata	Haplotaaxida	Tubificidae		39
					Arthropoda	Insecta	Coleoptera	Elmidae	Optioservus	8
					Arthropoda	Insecta	Coleoptera			8
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	8
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	115
					Arthropoda	Insecta	Diptera	Chironomidae	Eukiefferiella	8
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhopsis	39
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	131
					Arthropoda	insecta	Diptera	Chironomidae	Orthocladinae	77
					Arthropoda	Insecta	Diptera	Chironomidae	Parachironomus	8
					Arthropoda	Insecta	Diptera	Chironomidae	Parametriocnemus	8
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedium	15
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	31
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	1523
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	15
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	31
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	8
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	15
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	8
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	8
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	15
					Arthropoda	Insecta	Plecoptera	Nemouridae		69
					Arthropoda	Insecta	Plecoptera	Perlodidae	Skwala	8
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	23
					Arthropoda	Insecta	Trichoptera	Hydropsychidae	Hydropsyche	8
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Ceraclea	8
					Arthropoda	Insecta	Trichoptera			15
					Arthropoda	Malacostraca	Ostracoda			39
					Chelicerata	Arachnida	Oribatei	Hydrozetidae		8
					Chelicerata	Arachnida	Prostigmata	Hydryphantidae	Protzia	8
					Chelicerata	Arachnida	Prostigmata	Hydryphantidae		15
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	39
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	31
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	15
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	8
					Nemata					23
Total										2462

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Unnamed 4B (2007) 62.1803 N 122.4022 W	UNCK4B	Kicknet	1	Ref-Future	Annelida	Clitellata	Haplotaaxida	Tubificidae		68
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	5
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladius	21
					Arthropoda	Insecta	Diptera	Chironomidae	Eukiefferiella	5
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhopsis	5
					Arthropoda	Insecta	Diptera	Chironomidae	Micropsectra	63
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	68
					Arthropoda	Insecta	Diptera	Chironomidae	Stempellina	1105
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	63
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	21
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	174
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	11
					Arthropoda	Insecta	Diptera	Tipulidae	Limnophila	11
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	11
					Arthropoda	Insecta	Plecoptera	Capniidae		5
					Arthropoda	Insecta	Plecoptera	Nemouridae		84
					Arthropoda	Insecta	Plecoptera			11
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	63
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	16
					Arthropoda	Insecta	Trichoptera			37
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	95
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	32
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	32
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchonopsis	11
					Mollusca	Gastropoda	Basommatophora	Lymnaeidae	Lymnaea	5
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	16
					Nemata					63
								Total		2100

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts				
Vermillion Creek (2005) 65.0900 N 126.1419 W	VERM323	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Lumbriculida	Lumbriculidae	Rhynchelmis	15				
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomys	1				
					Arthropoda	Insecta	Diptera	Chironomidae	Corynoneura	4				
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	71				
					Arthropoda	Insecta	Diptera	Chironomidae	Eukiefferiella	16				
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	33				
					Arthropoda	Insecta	Diptera	Chironomidae		67				
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	77				
					Arthropoda	Insecta	Diptera	Empididae	Wiedemannia	11				
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	12				
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	3				
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis bicaudatus	77				
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis tricaudatus	1				
					Arthropoda	Insecta	Ephemeroptera	Baetidae		4				
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	1				
					Arthropoda	Insecta	Plecoptera	Capniidae		37				
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		17				
					Arthropoda	Insecta	Plecoptera	Nemouridae		88				
					Arthropoda	Insecta	Plecoptera	Perlodidae		7				
					Arthropoda	Insecta	Plecoptera	Taeniopterygidae		24				
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		7				
					Arthropoda	Insecta	Trichoptera	Lepidostomatidae		1				
					Chelicerata	Arachnida	Oribatei	Hydrozetidae		1				
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	1				
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	1				
					Mollusca	Gastropoda				1				
					Nemata					5				
					Total									585

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
White Sand Creek (2007) 63.5533 N 123.6628 W	WHSD388	Kicknet	1	Test	Annelida	Oligochaeta				2
					Arthropoda	Insecta	Diptera	Chironomidae	Cricotopus/Orthocladus	107
					Arthropoda	Insecta	Diptera	Chironomidae	Krenosmittia	1
					Arthropoda	Insecta	Diptera	Chironomidae	Potthastia longimana group	7
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	8
					Arthropoda	Insecta	Diptera	Chironomidae		6
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	6
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	2
					Arthropoda	Insecta	Diptera	Tipulidae	Hexatoma	1
					Arthropoda	Insecta	Diptera	Tipulidae	Rhabdomastix	1
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	2
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	4
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Acentrella	2
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Dipheter hageni	2
					Arthropoda	Insecta	Plecoptera	Capniidae		10
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	2
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Sweltsa	1
					Arthropoda	Insecta	Plecoptera	Chloroperlidae		8
					Arthropoda	Insecta	Trichoptera	Hydroptilidae	Hydroptila	1
					Arthropoda	Malacostraca	Ostracoda			7
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	2
					Nemata					1
								Total		183

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Willowlake River (2007) 62.7114 N 123.0822 W	WILL428	Kicknet	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Tubificidae		31
					Arthropoda	Branchiopoda	Cladocera			300
					Arthropoda	Insecta	Diptera	Ceratopogonidae	Bezzia/Palpomyia	46
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	15
					Arthropoda	Insecta	Diptera	Chironomidae	Microspectra	115
					Arthropoda	Insecta	Diptera	Chironomidae	Microtendipes	31
					Arthropoda	Insecta	Diptera	Chironomidae	Orthoclaadiinae	54
					Arthropoda	Insecta	Diptera	Chironomidae	Procladius	223
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	15
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	46
					Arthropoda	Insecta	Ephemeroptera	Ephemeridae	Ephemera	69
					Arthropoda	Insecta	Ephemeroptera	Ephemeridae	Hexagenia	8
					Arthropoda	Insecta	Ephemeroptera	Leptohyphidae	Tricorythodes	8
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Leptophlebia	739
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	585
					Arthropoda	Insecta	Ephemeroptera	Metretopodidae	Metretopus	108
					Arthropoda	Insecta	Heteroptera	Corixidae		15
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Oecetis	8
					Arthropoda	Insecta	Trichoptera	Polycentropodidae		
					Arthropoda	Insecta	Trichoptera		Polycentropus	39
					Arthropoda	Malacostraca	Ostracoda			8
					Arthropoda	Maxillipoda	Cyclopoida			54
					Chelicerata	Arachnida	Prostigmata	Torrenticolidae	Torrenticola	15
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	39
					Nemata					8
Total									2577	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Wood Bridge Creek (2007) 67.8514 N 132.1617 W	WOOD1	Kicknet	1	Ref-Future	Annelida	Oligochaeta				17
					Arthropoda	Insecta	Diptera	Chironomidae	Hydrobaenus	33
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	1067
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	417
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	17
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	17
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	183
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		33
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	133
					Arthropoda	Insecta	Plecoptera	Nemouridae		17
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	367
					Arthropoda	Malacostraca	Conchostraca			17
					Arthropoda	Malacostraca	Ostracoda			267
					Chelicerata	Arachnida	Prostigmata	Lebertiidae	Lebertia	33
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	467
					Chelicerata	Arachnida	Prostigmata			50
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	33
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	50
					Nemata					383
									Total	3600

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts				
Wood Bridge Creek (2007) 67.8514 N 132.1617 W	WOOD1	Kicknet	2	Ref-Future	Arthropoda	Insecta	Diptera	Chironomidae	Euryhapsis	100				
					Arthropoda	Insecta	Diptera	Chironomidae	Hydrobaenus	33				
					Arthropoda	Insecta	Diptera	Chironomidae	Limnophyes	33				
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	2833				
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	700				
					Arthropoda	Insecta	Diptera	Empididae	Chelifera/Metachela	33				
					Arthropoda	Insecta	Diptera	Simuliidae	Prosimulium	100				
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	767				
					Arthropoda	Insecta	Diptera	Simuliidae		267				
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	33				
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	67				
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	400				
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		33				
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	100				
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	33				
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	2200				
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	33				
					Arthropoda	Insecta	Trichoptera	Hydropsychidae		67				
					Arthropoda	Insecta	Trichoptera	Rhyacophilidae	Rhyacophila	33				
					Arthropoda	Malacostraca	Ostracoda			100				
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	67				
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	567				
					Chelicerata	Arachnida	Prostigmata			100				
					Cnidaria	Hydrozoa	Hydroida	Hydridae	Hydra	33				
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	133				
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	33				
					Nemata					400				
					Total									9300

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Wood Bridge Creek (2007) 67.8514 N 132.1617 W	WOOD1	Kicknet	3	Ref-Future	Annelida	Oligochaeta				33
					Arthropoda	Insecta	Diptera	Chironomidae	Euryhopsis	100
					Arthropoda	Insecta	Diptera	Chironomidae	Hydrobaenus	33
					Arthropoda	Insecta	Diptera	Chironomidae	Limnophyes	33
					Arthropoda	Insecta	Diptera	Chironomidae	Rheotanytarsus	10833
					Arthropoda	Insecta	Diptera	Chironomidae	Stictochironomus	33
					Arthropoda	Insecta	Diptera	Chironomidae	Thienemannimyia group	633
					Arthropoda	Insecta	Diptera	Simuliidae	Simulium	100
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	33
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	667
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	33
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	1267
					Arthropoda	Insecta	Trichoptera	Leptoceridae	Ceraclea	133
					Arthropoda	Insecta	Trichoptera	Leptoceridae		33
					Arthropoda	Insecta	Trichoptera	Rhyacophilidae	Rhyacophila	67
					Arthropoda	Malacostraca	Ostracoda			600
					Chelicerata	Arachnida	Prostigmata	Hydryphantidae		367
					Chelicerata	Arachnida	Prostigmata	Hygrobatidae	Hygrobates	167
					Chelicerata	Arachnida	Prostigmata	Sperchonidae	Sperchon	133
					Chelicerata	Arachnida	Prostigmata			100
					Mollusca	Bivalvia	Veneroida	Sphaeriidae	Pisidium	900
					Mollusca	Gastropoda	Basommatophora	Physidae	Physa	33
					Mollusca	Gastropoda	Basommatophora	Planorbidae	Gyraulus	67
					Nemata					200
									Total	16600

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Wrigley River (2006) 63.2320 N 123.6421 W	WRIG1	Kicknet	1	Ref-Future	Arthropoda	Insecta	Diptera	Athericidae	Atherix	3
					Arthropoda	Insecta	Diptera	Empididae	Chelifera	1
					Arthropoda	Insecta	Diptera	Empididae	Hemerodromia	2
					Arthropoda	Insecta	Ephemeroptera	Ameletidae	Ameletus	2
					Arthropoda	Insecta	Ephemeroptera	Baetidae	Baetis	2
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	Ephemerella	1
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Heptagenia	11
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae	Rhithrogena	14
					Arthropoda	Insecta	Ephemeroptera	Heptageniidae		13
					Arthropoda	Insecta	Ephemeroptera	Leptophlebiidae	Paraleptophlebia	1
					Arthropoda	Insecta	Plecoptera	Capniidae		1
					Arthropoda	Insecta	Plecoptera	Chloroperlidae	Suwallia	2
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	1
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	2
					Arthropoda	Insecta	Trichoptera			1
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		4
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		5
Total									66	

Table 2. continued.

Site Name	CABIN Site ID	Sampling Device	Sample Number	Site Class	Phylum	Class	Order	Family	Genus and Species	No. of Inverts
Yaya Rvier (2006) 69.2274 N 134.5801 W	YAYA007	Kicknet	1	Ref-Pipe	Annelida	Oligochaeta				56
					Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	72
					Arthropoda	Insecta	Diptera	Chironomidae	Polypedilum	56
					Arthropoda	Insecta	Diptera	Chironomidae	Tanytarsus	176
					Arthropoda	Insecta	Diptera	Chironomidae		64
					Arthropoda	Insecta	Diptera	Empididae	Clinocera	24
					Arthropoda	Insecta	Diptera	Tipulidae	Dicranota	136
					Arthropoda	Insecta	Diptera	Tipulidae	Tipula	8
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	440
					Arthropoda	Insecta	Trichoptera	Brachycentridae	Brachycentrus	944
					Arthropoda	Insecta	Trichoptera	Glossosomatidae	Glossosoma	24
					Chelicerata	Arachnida	Prostigmata	Lebertiidae		40
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		128
					Mollusca	Bivalvia	Pelecypoda			72
					Mollusca	Gastropoda	Basommatophora	Planorbidae		184
Total									2424	
Zed Creek (2006) 68.9501 N 133.5393 W	ZED001	Ponar	1	Ref-Pipe	Annelida	Clitellata	Haplotaxida	Naididae		28
					Annelida	Clitellata	Haplotaxida	Tubificidae		31
					Annelida	Clitellata	Lumbriculida	Lumbriculidae		37
					Annelida	Clitellata	Rhynchobdellida	Hirudinidae		3
					Arthropoda	Insecta	Diptera	Chironomidae		416
					Arthropoda	Insecta	Plecoptera	Nemouridae	Nemoura	3
					Arthropoda	Malacostraca	Ostracoda			168
					Arthropoda	Maxillipoda	Harpacticoida			12
					Chelicerata	Arachnida	Prostigmata	Sperchonidae		3
					Mollusca	Bivalvia	Veneroida	Pisidiidae		15
					Mollusca	Gastropoda	Heterostropho	Valvatidae	Valvata sincera	28
					Nemata					232
Total									976	

Table 3. Reach characteristics of the 102 streams sampled in the Mackenzie River Valley following the Reference Condition Approach (2005-2007).

Site Name	Region	Pipeline ID	Year	Julian Day	Elevation (m asl)	Habitat Types Present	Canopy Coverage	Macrophyte Coverage	Riparian Vegetation Dominant	Substrate Dominant (mm)	Substrate Sub-Dominant	Embedded-ness	Surrounding Material (mm)	Bankfull Width (m)	Wetted Width (m)	Channel Ratio (wetted: bankfull)	Mean Depth (cm)	Max Depth (cm)	Mean Velocity (m/s)	Max Velocity (m/s)	Slope (m/m)
Aklak Ch	ISR	RNT-002	2007	251	0	Run	0%	0%	Grasses	<1	<1	Completely Embedded	<1	39.0	37.0	0.949	30.0	44	0.01	0.02	0.000
Big Lake Ck	GSA	-	2006	255	61	Riffle, Run, Pool	0%	0%	Coniferous	11-32	32-64	1/4 Embedded	1-2	27.0	15.0	0.556	62.0	114	1.07	1.42	0.006
Big Smith Ck	SSA	RPR-349	2006	257	109	Run, Pool	0%	0%	Shrubs	1-2	<1	Unembedded	<1	36.0	21.6	0.600	64.2	112	0.14	0.20	0.004
Billy Ck	SSA	RPR-299	2005	254	60	Run, Pool, Debris Dam	1-25%	51-75%	Coniferous	Organic Cover	<1	Completely Embedded	1-2	9.0	6.0	0.667	50.0	200	0.05	0.50	0.000
Borrow 20.17	ISR	-	2007	251	82	Riffle, Run, Pool	1-25%	0%	Shrubs	32-64	11-32	1/4 Embedded	2-5	3.6	2.8	0.778	14.0	22	0.02	0.06	0.010
Bosworth Ck	SSA	RPR-301	2005	254	60	Riffle, Run	0%	0%	Shrubs	32-64	11-32	Unembedded	2-5	20.0	15.0	0.750	20.0	80	0.46	0.80	0.018
Brackett R	SSA	-	2006	257	91	Run	0%	0%	Coniferous	11-32	32-64	1/4 Embedded	<1	57.0	39.8	0.695	62.6	116	0.48	1.07	0.002
Campbell Ck	GSA	-	2006	255	26	Pool/Back Eddy	0%	1-25%	Shrubs	<1	1-2	Completely Embedded	<1	38.0	32.0	0.842	200.0	200	0.09	0.15	0.001
Campbell R	GSA	-	2007	249	17	Run	1-25%	1-25%	Grasses	<1	<1	Completely Embedded	<1	79.0	77.0	0.975	71.0	92	0.03	0.63	0.000
Canyon Ck	SSA	RPR-308	2005	255	66	Riffle, Run	0%	0%	Coniferous	32-64	11-32	Unembedded	2-5	20.0	5.0	0.250	25.0	100	0.38	0.85	0.014
Chick Ck	SSA	RPR-267	2005	254	138	Riffle, Pool	1-25%	0%	Shrubs	64-120	32-64	Unembedded	5-25	6.0	3.0	0.500	20.0	50	0.27	0.90	0.009
Cil Ck	DEC	-	2006	261	252	Run	0%	1-25%	Shrubs	11-32	32-64	1/4 Embedded	<1	10.0	10.0	1.000	77.0	102	0.46	0.55	0.003
Dahadinni R	DEC	-	2006	259	117	Riffle, Run	0%	0%	Coniferous	11-32	32-64	Unembedded	1-2	103.3	46.0	0.445	65.1	94	0.51	0.86	0.001
Dam Ck	DEC	RPR-381	2006	259	198	Run, Pool	26-50%	1-25%	Shrubs	11-32	32-64	1/2 Embedded	1-2	7.0	4.0	0.571	35.6	46	0.20	0.28	0.002
Dehithih Dehe R	DEC	-	2006	260	624	Run, Pool	0%	0%	Grasses	2-11	11-32	1/2 Embedded	1-2	7.0	4.5	0.643	54.7	90	0.14	0.38	0.003
Dodo Ck	SSA	-	2006	256	328	Riffle	0%	0%	Mineral/None	11-32	32-64	1/4 Embedded	1-2	37.6	12.3	0.327	18.2	33	0.48	1.05	0.020
Donnelly R	SSA	RPR-366	2005	254	124	Riffle, Run	0%	1-25%	Grasses	64-120	120-250	Unembedded	5-25	60.0	30.0	0.500	30.0	150	0.22	0.32	0.000
Douglas Ck	GSA	-	2006	252	9	Run, Pool	51-75%	0%	Deciduous	2-11	1-2	Completely Embedded	<1	5.2	4.7	0.904	38.0	41.8	0.28	0.35	0.001
East Ch	ISR	RPR-013	2006	251	4	Run	0%	0%	Mineral/None	1-2	2-11	Completely Embedded	<1	324.0	307.0	0.948	200.0	200	0.10	0.02	0.000
Elliot Ck	SSA	RPR-288	2005	254	60	Riffle, Run	1-25%	0%	Shrubs	11-32	32-64	1/4 Embedded	2-5	15.0	7.0	0.467	30.0	50	0.40	0.86	0.005
Fish Trap Ck	GSA	-	2006	255	206	Pool/Back Eddy	1-25%	0%	Shrubs	<1	1-2	Completely Embedded	<1	17.0	14.0	0.824	200.0	200	0.10	0.02	0.002
Francis Ck	SSA	RPR-306	2005	255	79	Riffle, Run	1-25%	0%	Coniferous	32-64	11-32	Unembedded	2-5	8.0	3.0	0.375	10.0	50	0.10	0.17	0.018
Gossage Ck	SSA	-	2006	256	39	Riffle, Pool	26-50%	0%	Shrubs	11-32	32-64	1/2 Embedded	1-2	14.5	11.0	0.750	24.8	43	0.50	1.03	0.004
Hanna R	SSA	RPR-285	2005	254	99	Riffle, Run, Pool	1-25%	0%	Shrubs	11-32	32-64	1/4 Embedded	2-5	25.0	12.0	0.480	25.0	80	0.54	0.80	0.003
Hans Ck	ISR	RPR-036	2006	252	54	Run, Pool	1-25%	0%	Shrubs	<1	<1	Completely Embedded	<1	8.3	7.3	0.880	150.0	150	0.10	0.25	0.000
Harris R	DEC	RPR-486	2007	256	124	Riffle, Run, Pool	1-25%	0%	Deciduous	32-64	64-120	1/2 Embedded	5-25	20.0	11.3	0.565	30.0	51	0.15	0.51	0.010
Harry Ch	ISR	RPR-002	2006	251	0	Run	0%	0%	Shrubs	<1	<1	Completely Embedded	<1	53.3	31.6	0.593	75.0	200	0.12	0.32	0.000
Heleva Ck	SSA	RPR-310	2005	255	75	Riffle, Pool	1-25%	1-25%	Coniferous	32-64	64-120	Unembedded	5-25	5.0	3.0	0.600	10.0	50	0.07	0.30	0.012
Hodgson Ck	DEC	RPR-399	2006	259	240	Rapids, Riffle	0%	0%	Coniferous	11-32	32-64	1/4 Embedded	1-2	25.6	10.3	0.402	22.3	32	0.57	1.00	0.010
Holmes Ck	ISR	-	2006	251	15	Run, Pool	0%	0%	Shrubs	1-2	1-2	Completely Embedded	1-2	14.2	11.2	0.789	98.0	110	0.44	0.50	0.001

Table 3. continued.

Site Name	Region	Pipeline ID	Year	Julian Day	Elevation (m asl)	Habitat Types Present	Canopy Coverage	Macrophyte Coverage	Riparian Vegetation Dominant	Substrate Dominant (mm)	Substrate Sub-Dominant	Embedded-ness	Surrounding Material (mm)	Bankfull Width (m)	Wetted Width (m)	Channel Ratio (wetted: bankfull)	Mean Depth (cm)	Max Depth (cm)	Mean Velocity (m/s)	Max Velocity (m/s)	Slope (m/m)
Husky Ck	ISR	-	2006	252	28	Rifle, Run, Pool	0%	0%	Shrubs	11-32	2-11	1/4 Embedded	1-2	31.0	13.4	0.432	32.7	60	0.64	0.93	0.005
Jackfish Ck	SSA	RPR-253	2005	253	45	Run, Pool, Debris Dam	0%	51-75%	Grasses	Organic Cover	<1	Completely Embedded	1-2	8.0	6.0	0.750	30.0	100	0.01	0.20	0.000
Jean-Marie R1	DEC	RPR-475	2007	255	191	Rifle, Run	1-25%	1-25%	Shrubs	>250	120-250	1/2 Embedded	25-50	27.0	24.0	0.889	74.0	74	1.35	1.35	0.015
Jean-Marie R2	DEC	RPR-475	2006	261	191	Run, Pool	0%	0%	Shrubs	32-64	64-120	Completely Embedded	5-25	24.6	24.0	0.976	74.2	102	0.65	1.75	0.001
Johnson R	DEC	-	2006	259	100	Rifle, Run	0%	0%	Shrubs	32-64	11-32	1/2 Embedded	2-5	96.0	44.5	0.464	67.5	90	0.46	0.95	0.006
Jungle Ridge Ck	SSA	RPR-325	2005	255	105	Chute, Pool	1-25%	1-25%	Shrubs	64-120	120-250	Unembedded	5-25	5.0	3.5	0.700	40.0	120	0.21	0.26	0.005
Kuluarpak Ch	ISR	RNT-006	2007	251	4	Run	0%	0%	Grasses	<1	<1	Completely Embedded	<1	90.0	80.0	0.889	24.0	24	0.03	0.03	0.000
Kumak Ch	ISR	RNT-001	2007	251	0	Run	0%	0%	Mineral/None	<1	<1	Completely Embedded	<1	>200	>200	-	30.0	48	0.12	0.20	0.000
Little Smith Ck	SSA	RPR-351	2006	257	148	Rifle, Run, Pool	0%	0%	Coniferous	11-32	32-64	1/4 Embedded	1-2	26.1	16.3	0.625	19.8	46	0.36	0.71	0.003
Leon R	SSA	RPR-232	2005	253	48	Rifle, Run	0%	0%	Coniferous	64-120	120-250	Unembedded	5-25	60.0	40.0	0.667	20.0	60	0.60	1.06	0.003
Mackenzie R	DEC	RPR-470	2007	256	115	Run	0%	0%	Deciduous	64-120	120-250	1/2 Embedded	25-50	>1000	>1000	-	62.0	87	0.51	0.70	0.000
Martin R	DEC	-	2006	261	135	Rapids, Rifle	0%	0%	Coniferous	64-120	120-250	1/4 Embedded	1-2	39.3	30.0	0.763	57.4	98	0.36	1.26	0.006
Nadia Ck	DEC	RPR-468	2007	256	121	Run, Pool	76-100%	0%	Shrubs	>250	120-250	1/2 Embedded	25-50	6.4	5.0	0.781	33.4	45	0.16	0.37	0.010
Noell Ck	ISR	-	2006	252	64	Chute, Pool	26-50%	1-25%	Shrubs	32-64	11-32	1/2 Embedded	2-5	14.5	5.7	0.393	48.1	62	0.60	1.51	0.007
North Nahanni R	DEC	-	2007	257	171	Run	0%	0%	Deciduous	11-32	32-64	1/2 Embedded	<1	147.0	82.0	0.558	60.3	90	0.38	0.78	0.010
Nota Ck	SSA	RPR-324	2005	255	116	Rifle, Run	1-25%	51-75%	Shrubs	32-64	64-120	1/2 Embedded	1-2	5.0	3.0	0.600	10.0	60	0.11	0.33	0.010
Ochre R	DEC	RPR-391	2007	254	138	Rapids, Rifle, Run, Pool	0%	0%	Mineral/None	64-120	32-64	1/2 Embedded	5-25	54.5	26.0	0.477	56.0	92	0.37	0.70	0.005
Oscar Ck	SSA	RPR-292	2005	254	99	Rifle, Run, Pool	1-25%	0%	Coniferous	11-32	64-120	Unembedded	1-2	25.0	15.0	0.600	40.0	150	0.20	0.46	0.001
Peekaya Ck	DEC	-	2007	256	152	Rifle, Run, Pool	1-25%	1-25%	Shrubs	32-64	64-120	1/2 Embedded	2-5	12.3	12.3	1.000	15.0	22	0.19	0.40	0.010
Petitot R	Alta	NWTL-22	2006	260	542	Rifle, Pool	0%	1-25%	Grasses	32-64	64-120	1/2 Embedded	1-2	10.3	8.0	0.777	15.6	25	0.12	0.38	0.001
Poplar R	DEC	-	2006	261	244	Rifle, Run, Pool	0%	0%	Grasses	32-64	64-120	Unembedded	2-5	26.6	23.3	0.876	57.7	110	0.44	0.92	0.005
Prohibition Ck	SSA	RPR-313	2005	255	83	Rifle, Run, Pool	0%	1-25%	Coniferous	120-250	64-120	Unembedded	25-50	18.0	5.0	0.278	20.0	60	0.20	0.34	0.010
Rabbit Skin R	DEC	-	2007	256	175	Rifle, Run	1-25%	1-25%	Grasses	64-120	32-64	1/2 Embedded	5-25	29.6	16.1	0.544	50.0	70	0.33	0.50	0.005
River Blw 2 Mtns	DEC	RPR-419	2007	254	152	Rifle, Run, Pool	1-25%	0%	Mineral/None	32-64	64-120	1/4 Embedded	2-5	58.4	31.8	0.545	55.0	70	0.50	0.71	0.010
RPR-001	ISR	RPR-001	2006	251	0	Run	0%	0%	Grasses	<1	Organic Cover	Completely Embedded	<1	119.6	95.0	0.794	200.0	200	0.09	0.15	0.000
RPR-005	ISR	RPR-005	2007	251	0	Run	0%	0%	Grasses	<1	<1	Completely Embedded	<1	55.0	53.0	0.964	12.0	12	0.03	0.03	0.000
RPR-008	ISR	RPR-008	2007	251	10	Run	26-50%	76-100%	Shrubs	Organic Cover	<1	Completely Embedded	<1	21.0	21.0	1.000	68.0	78	0.14	0.14	0.005
RPR-011	ISR	RPR-011	2007	251	0	Run	0%	0%	Grasses	<1	<1	Completely Embedded	<1	133.0	132.5	0.996	20.0	20	0.00	0.00	0.000
RPR-012	ISR	RPR-012	2007	251	0	Run	0%	51-75%	Grasses	<1	<1	Completely Embedded	<1	20.5	14.0	0.683	49.0	59	0.01	0.01	0.000
RPR-046	ISR	RPR-046	2007	250	61	Run	1-25%	51-75%	Shrubs	<1	<1	Completely Embedded	<1	31.0	28.3	0.913	59.0	65	0.00	0.00	0.005

Table 3. continued.

Site Name	Region	Pipeline ID	Year	Julian Day	Elevation (m asl)	Habitat Types Present	Canopy Coverage	Macrophyte Coverage	Riparian Vegetation Dominant	Substrate Dominant (mm)	Substrate Sub-Dominant	Embedded-ness	Surrounding Material (mm)	Bankfull Width (m)	Wetted Width (m)	Channel Ratio (wetted: bankfull)	Mean Depth (cm)	Max Depth (cm)	Mean Velocity (m/s)	Max Velocity (m/s)	Slope (m/m)
RPR-048	ISR	RPR-048	2007	250	57	Run	1-25%	51-75%	Shrubs	<1	<1	Completely Embedded	<1	13.0	10.6	0.815	78.0	116	0.03	0.12	0.010
RPR-059	ISR	RPR-059	2007	250	18	Run, Pool	1-25%	1-25%	Grasses	<1	<1	Completely Embedded	<1	3.7	3.7	1.000	25.0	30	0.00	0.01	0.005
RPR-065	GSA	RPR-065	2007	249	7	Run, Pool	1-25%	26-50%	Grasses	<1	11-32	Completely Embedded	<1	25.0	21.0	0.840	86.0	98	0.00	0.00	0.000
RPR-069	GSA	RPR-069	2007	249	8	Rifle, Run, Pool	26-50%	51-75%	Shrubs	<1	11-32	Completely Embedded	<1	5.5	4.2	0.784	30.0	66	0.05	0.28	0.010
RPR-070	GSA	RPR-070	2005	242	173	Chute, Pool	26-50%	1-25%	Shrubs	120-250	64-120	1/4 Embedded	5-25	6.0	3.0	0.500	35.0	150	0.80	1.50	0.007
RPR-075	GSA	RPR-075	2005	242	227	Chute, Pool	26-50%	1-25%	Shrubs	11-32	64-120	1/2 Embedded	1-2	3.0	1.5	0.500	50.0	100	0.06	0.96	0.009
RPR-075	GSA	RPR-075	2007	252	227	Rifle, Run, Pool	26-50%	1-25%	Shrubs	11-32	32-64	1/4 Embedded	2-5	5.5	2.6	0.473	12.7	18	0.15	0.29	0.015
RPR-089	GSA	RPR-089	2007	250	171	Pool/Back Eddy	1-25%	26-50%	Grasses	<1	11-32	Completely Embedded	<1	7.5	5.6	0.747	48.0	54	-0.03	-0.01	0.000
RPR-117	GSA	RPR-117	2005	242	244	Chute, Pool	51-75%	26-50%	Shrubs	11-32	32-64	1/2 Embedded	1-2	1.8	1.5	0.833	15.0	40	0.39	0.82	0.005
RPR-271	SSA	RPR-271	2005	254	111	Run, Pool, Debris Dam	1-25%	1-25%	Shrubs	1-2	2-11	3/4 Embedded	<1	3.0	1.5	0.500	25.0	40	0.08	0.15	0.004
RPR-403	DEC	RPR-403	2007	254	177	Rifle, Run	1-25%	0%	Shrubs	32-64	11-32	1/2 Embedded	2-5	12.1	5.6	0.463	19.9	32	0.23	0.67	0.030
RPR-481	DEC	RPR-481	2007	255	395	Run	1-25%	1-25%	Grasses	120-250	64-120	1/2 Embedded	25-50	11.0	11.0	1.000	38.0	42	0.56	0.95	0.010
Saline Ck	SSA	RPR-358	2006	257	79	Rifle, Run	0%	0%	Mineral/None	11-32	32-64	Completely Embedded	1-2	22.3	11.0	0.463	25.3	45	0.31	0.67	0.017
Sandy Ck	GSA	-	2006	255	153	Rifle, Run	0%	0%	Shrubs	32-64	11-32	Unembedded	2-5	74.0	21.3	0.288	31.8	49	31.60	48.00	0.006
Smith Ck	DEC	RPR-410	2007	254	217	Rapids, Rifle, Run, Pool	1-25%	0%	Coniferous	>250	120-250	1/2 Embedded	5-25	5.2	5.2	1.000	43.0	78	0.12	0.31	0.010
South Snafu Ck	SSA	RPR-261	2005	254	130	Rifle, Run, Pool	1-25%	1-25%	Shrubs	64-120	32-64	Unembedded	2-5	12.0	5.0	0.417	20.0	60	0.14	0.24	0.004
Stanley Ck	ISR	-	2006	252	52	Rifle, Run, Pool	0%	0%	Shrubs	32-64	11-32	1/4 Embedded	2-5	13.9	10.7	0.770	36.3	59	0.78	0.99	0.010
Steep Ck	SSA	RPR-371	2006	257	129	Rapids	0%	0%	Shrubs	32-64	64-120	Unembedded	2-5	21.3	11.0	0.518	30.0	60	0.53	1.21	0.020
Thinahtea Ck	Alta	NWTL-07	2008	260	489	Pool/Back Eddy	0%	0%	Grasses	11-32	32-64	1/2 Embedded	<1	8.0	7.0	0.875	46.0	73	0.02	0.05	0.000
Thunder R	GSA	RPR-141	2005	242	61	Rifle, Run, Pool	26-50%	0%	Coniferous	32-64	64-120	Unembedded	5-25	8.0	2.5	0.313	10.0	50	0.37	0.56	0.004
Tieda R	SSA	RPR-221	2005	253	58	Rifle, Run, Pool	0%	0%	Coniferous	32-64	64-120	Unembedded	5-25	18.0	12.0	0.667	20.0	50	0.27	0.39	0.009
Travalliant R	GSA	RPR-097	2005	242	188	Rifle, Run, Pool	0%	0%	Shrubs	64-120	32-64	Unembedded	5-25	12.0	8.0	0.667	15.0	75	0.35	0.61	0.002
Travalliant R	GSA	-	2006	255	122	Run	0%	0%	Shrubs	<1	1-2	Completely Embedded	<1	24.0	15.0	0.625	100.0	150	0.80	0.80	0.000
Trout R	DEC	RPR-479	2006	260	342	Run	0%	0%	Coniferous	11-32	32-64	1/4 Embedded	1-2	55.6	49.6	0.892	51.4	76	0.72	1.00	0.001
Trout Rd Xing1	DEC	-	2007	255	265	Rifle, Run	1-25%	0%	Coniferous	64-120	32-64	1/2 Embedded	5-25	28.4	17.0	0.844	45.0	58	0.45	0.50	0.010
Trout Rd Xing2	DEC	-	2007	255	266	Rifle, Run	1-25%	0%	Coniferous	>250	120-250	1/4 Embedded	25-50	33.9	33.9	1.000	27.0	40	0.37	0.71	0.010
Trout Rd Xing3	DEC	-	2007	255	549	Run, Pool	1-25%	1-25%	Grasses	11-32	2-11	1/2 Embedded	1-2	8.3	6.6	0.785	37.0	58	0.25	0.56	0.005
Unnamed 01	DEC	-	2007	252	47	Run	1-25%	51-75%	Grasses	Organic Cover	<1	Completely Embedded	<1	16.0	11.0	0.688	18.0	22	0.00	0.00	0.000
Unnamed 02	ISR	-	2007	252	57	Run, Pool	1-25%	26-50%	Shrubs	<1	11-32	Completely Embedded	1-2	10.0	10.0	1.000	100.0	107	0.00	0.01	0.000
Unnamed 03	GSA	-	2007	252	35	Run, Pool	1-25%	26-50%	Shrubs	<1	<1	Completely Embedded	<1	6.8	6.8	1.000	55.0	64	-0.01	0.02	0.000
Unnamed 10	ISR	-	2007	250	58	Rifle, Run, Pool	1-25%	0%	Mineral/None	32-64	64-120	1/2 Embedded	2-5	25.7	12.0	0.467	18.0	31	0.16	0.25	0.020

Table 3. continued.

Site Name	Region	Pipeline ID	Year	Julian Day	Elevation (m asl)	Habitat Types Present	Canopy Coverage	Macrophyte Coverage	Riparian Vegetation Dominant	Substrate Dominant (mm)	Substrate Sub-Dominant	Embedded-ness	Surrounding Material (mm)	Bankfull Width (m)	Wetted Width (m)	Channel Ratio (wetted: bankfull)	Mean Depth (cm)	Max Depth (cm)	Mean Velocity (m/s)	Max Velocity (m/s)	Slope (m/m)
Unnamed 16	GSA	-	2007	252	85	Rifle, Run, Pool	1-25%	0%	Shrubs	32-64	64-120	1/2 Embedded	5-25	14.5	7.0	0.493	38.0	54	0.21	0.55	0.025
Unnamed 41	DEC	-	2007	256	208	Rapids, Rifle, Run, Pool	1-25%	0%	Coniferous	64-120	120-250	1/2 Embedded	25-50	21.0	12.3	0.586	40.0	50	0.18	0.32	0.015
Unnamed 4A	DEC	-	2007	256	156	Rifle, Run	1-25%	0%	Shrubs	32-64	11-32	1/4 Embedded	2-5	7.6	7.2	0.947	48.0	59	0.11	0.22	0.005
Unnamed 4B	DEC	-	2007	256	156	Rifle, Run, Pool	1-25%	0%	Shrubs	64-120	32-64	1/2 Embedded	5-25	10.3	9.4	0.913	25.0	40	0.25	0.35	0.005
Vermilion Ck	SSA	RPR-323	2005	255	87	Rifle, Run, Pool	1-25%	1-25%	Shrubs	32-64	64-120	Unembedded	2-5	20.0	8.0	0.300	25.0	75	0.35	0.51	0.011
White Sand Ck	DEC	RPR-388	2007	254	153	Rapids, Rifle, Run, Pool	1-25%	0%	Mineral/None	32-64	11-32	1/2 Embedded	1-2	25.5	18.5	0.725	56.0	44	0.28	0.60	0.025
Wilowake R	DEC	RPR-428	2007	254	136	Run	0%	1-25%	Mineral/None	32-64	11-32	3/4 Embedded	1-2	168.0	141.0	0.839	54.5	105	0.06	0.10	0.000
Wood Bridge Ck	GSA	-	2007	250	172	Rifle, Run, Pool	1-25%	1-25%	Grasses	11-32	32-64	1/4 Embedded	2-5	13.8	10.5	0.761	14.0	20	0.09	0.14	0.005
Wigley R	DEC	-	2006	259	107	Run	0%	0%	Coniferous	11-32	32-64	1/2 Embedded	<1	52.0	28.3	0.563	57.0	76	0.61	0.94	0.002
Yaya R	ISR	RPR-007	2006	251	2	Run	0%	0%	Shrubs	1-2	2-11	1/4 Embedded	1-2	64.0	2.0	0.031	61.0	68	0.37	0.52	0.000
Zed Ck	ISR	RPL-001	2006	252	29	Run, Pool	1-25%	51-75%	Grasses	Organic Cover	<1	Completely Embedded	<1	25.0	21.0	0.840	110.0	150	0.23	0.40	0.000

Table 4. Watershed characteristics of the 75 streams sampled by kicknet in the Mackenzie River Valley following the Reference Condition Approach (2005-2007). All values pertain to the catchment area upstream of the sample site only.

Site Name	Basin Perimeter Length (km)	Basin Area (km ²)	Stream Length (km) ¹	Drainage Density (km/km ²)
Big Lake Ck	569	2,547	2,925	1.2
Billy Ck	82	139	143	1.0
Borrow 20.17	48	43	n/a	-
Bosworth Ck	89	114	161	1.4
Brackett R	103	82	55	0.7
Canyon Ck	53	69	67	1.0
Chick Ck	58	51	49	1.0
Cli Ck	90	197	105	0.5
Dahadinni R	459	2,407	2,279	0.9
Dam Ck	52	75	53	0.7
Dehtthih Dehe R	53	35	31	0.9
Dodo Ck	32	24	27	1.1
Donnelly R	323	1,134	1,230	1.1
Elliot Ck	62	40	31	0.8
Francis Ck	41	28	28	1.0
Gossage Ck	187	607	750	1.2
Hanna R	102	219	224	1.0
Harris R	172	635	354	0.6
Heleva Ck	40	27	21	0.8
Hodgson Ck	74	131	84	0.6
Holmes Ck	57	78	n/a	-
Husky Ck	146	341	n/a	-
Jackfish Ck	45	56	68	1.2
Jean-Marie R1	319	1,535	466	0.3
Jean-Marie R2	319	1,490	461	0.3
Johnson R	370	2,195	2,186	1.0
Jungle Ridge Ck	65	91	42	0.5
Little Smith Ck	157	449	373	0.8
Loon R	476	2,948	4,467	1.5
Mackenzie R	12,052	1,024,428	1,047,893	1.0
Martin R	323	1,994	1,541	0.8
Nadia Ck	95	181	85	0.5
Noell Ck	72	116	n/a	-
North Nahanni R	821	6,713	7,566	1.1
Nota Ck	56	81	49	0.6
Ochre R	289	1,168	1,311	1.1
Oscar Ck	260	800	862	1.1
Peekaya Ck	95	155	98	0.6
Petitot R	106	285	245	0.9
Poplar R	247	1,501	n/a	-
Prohibition Ck	69	93	89	1.0
Rabbit Skin R	431	2,925	1,981	0.7
River Btw 2 Mtns	496	3,401	3,273	1.0
RPR-070	122	168	n/a	-

¹ Stream Length (km) is the total length of all mapped streams in the catchment measured upstream of the sample site.

Table 4. continued.

Site Name	Basin Perimeter (km)	Basin Area (km ²)	Stream Length (km)	Drainage Density (km/km ²)
RPR-075 (2005)	60	72	n/a	-
RPR-075 (2007)	60	72	n/a	-
RPR-117	48	40	40	1.0
RPR-271	22	15	10	0.7
RPR-403	50	60	44	0.7
RPR-481	107	256	91	0.4
Saline Ck	1321	16,863	330	<0.1
Sandy Ck	231	745	n/a	-
Smith Ck	69	106	127	1.2
South Snafu Ck	62	98	72	0.7
Stanley Ck	139	432	n/a	-
Steep Ck	247	1,279	142	0.1
Thinahtea Ck	75	87	80	0.9
Thunder R	164	307	438	1.4
Tieda R	283	937	1,173	1.3
Travaillant R (2005)	127	294	398	1.4
Trout R	690	6,522	4,059	0.6
Trout Rd Xing1	246	918	609	0.7
Trout Rd Xing2	153	566	367	0.6
Trout Rd Xing3	56	87	17	0.2
Unnamed 10	268	842	1,034	1.2
Unnamed 16	78	149	706	4.7
Unnamed 41	120	250	168	0.7
Unnamed 4A	93	187	134	0.7
Unnamed 4B	93	187	134	0.7
Vermillion Ck	79	77	80	1.0
White Sand Ck	133	330	260	0.8
Willowlake R	1,575	21,199	22,466	1.1
Wood Bridge Ck	149	333	422	1.3
Wrigley R	192	574	1022	1.8
Yaya R	-	-	-	-

¹ Stream Length (km) is the total length of all mapped streams in the catchment measured upstream of the sample site.

Table 5. Landscape attributes of the 102 streams sampled in the Mackenzie River Valley following the Reference Condition Approach (2005-2007).

Site Name	Tertiary Watershed	Ecoregion	Ecozone	Permafrost Extent	Ground Ice (in upper 20 m)	Overburden Thickness	Riparian Vegetation	Geological Era	Geological Period	Parent Material of Deposition	Surface Material (Surficial)	Kind of Material	Coarse Fragment Content (by volume)	Local Surface Form	Slope of the Surrounding Terrain	Drainage Attributes
Aldik Ch	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium	Thick >5m	Shrubland	Cenozoic	Quaternary	Alluvial	Alluvial Deposits	Mineral soil	<10%	Level	<4%	Imperfect
Big Lake Ck	Lower Mackenzie	Great Bear Lake Plain	Taiga Plains	Continuous	High	Thick >5m	Lichen	Paleozoic	Devonian	Bog	Fine grained (Glacio)Lacustrine	Organic soil	Non-applicable	Polygonal peat plateau bog	<4%	Poor
Big Smith Ck	Central Mackenzie	Franklin Mountains	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Paleozoic	Cambrian-Ordovician	Lacustrine	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Undulating	4-9%	Poor
Billy Ck	Lower Central Mackenzie	Mackenzie River Plain	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Lacustrine	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Undulating	4-9%	Moderately well
Borrow 20.17	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium	Thick >5m	Tundra, high shrub	Cenozoic	Neogene	Morainal	Till Veneer	Mineral soil	10-30%	Rolling	4-9%	Imperfect
Bosworth Ck	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Fine grained (Glacio)Lacustrine	Mineral soil	31-65%	Inclined	4-9%	Moderately well
Brackett R	Great Bear	Norman Range	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Mesozoic	Cretaceous	Morainal	Till Blanket	Mineral soil	<10%	Hummocky (or irregular)	10-15%	Poor
Campbell Ck	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Continuous	High	Thick >5m	Coniferous Forest	Cenozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-20%	Rolling	4-9%	Imperfect
Campbell R	Lower Mackenzie	Great Bear Lake Plain	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Paleozoic	Cambrian-Devonian	Rock	Alluvial Deposits	Mineral soil	Non-applicable	Inclined	10-30%	Non-applicable
Canyon Ck	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Coarse grained (Glacio)Lacustrine	Mineral soil	31-65%	Inclined	4-9%	Moderately well
Chick Ck	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Low	Thin <5m	Coniferous Forest	Mesozoic	Cretaceous	Morainal	Coarse grained (Glacio)Lacustrine	Mineral soil	31-65%	Inclined	10-15%	Moderately well
Cl Ck	Upper Central Mackenzie	Sibbeston Lake Plain	Taiga Plains	Discontinuous	Low	Thin <5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Inclined	10-15%	Moderately well
Dahadinni R	Central Mackenzie	Mackenzie River Plain	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Mesozoic	Cretaceous	Morainal	Fine grained (Glacio)Lacustrine	Mineral soil	10-30%	Hummocky (or irregular)	10-15%	Moderately well
Dam Ck	Central Mackenzie	Franklin Mountains	Taiga Plains	Discontinuous	Low	Thin <5m	Coniferous Forest	Paleozoic	Devonian	Lacustrine	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Level	<4%	Poor
Dehtitih Deha R	Upper Mackenzie	Northern Alberta Uplands	Taiga Plains	Sporadic	Low	Thick >5m	Mixed forest	Mesozoic	Cretaceous	Morainal	Till Blanket	Mineral soil	10-30%	Undulating	4-9%	Moderately well
Dodo Ck	Lower Central Mackenzie	Peel River Plateau	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Paleozoic	Cambrian-Devonian	Morainal	Till Veneer	Mineral soil	<10%	Inclined	10-15%	Moderately well
Donnelly R	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Low	Thin <5m	Lichen	Mesozoic	Cretaceous	Bog	Coarse grained (Glacio)Lacustrine	Organic soil	Non-applicable	Polygonal peat plateau bog	<4%	Poor
Douglas Ck	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium	Thick >5m	Coniferous Forest	Cenozoic	Quaternary	Morainal	Till Veneer	Mineral soil	10-30%	Rolling	4-9%	Imperfect
East Ch	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Alluvial Deposits	Mineral soil	10-30%	Rolling	4-9%	Imperfect
Eliot Ck	Lower Central Mackenzie	Mackenzie River Plain	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Mesozoic	Cretaceous	Lacustrine	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Undulating	4-9%	Moderately well
Fish Trap Ck	Lower Mackenzie	Great Bear Lake Plain	Taiga Plains	Continuous	High	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	10-15%	Imperfect
Francis Ck	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Coarse grained (Glacio)Lacustrine	Mineral soil	31-65%	Inclined	4-9%	Moderately well
Gossage Ck	Lower Mackenzie	Fort MacPherson Plain	Taiga Plains	Continuous	High	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	<10%	Hummocky (or irregular)	4-9%	Poor
Hanna R	Lower Central Mackenzie	Mackenzie River Plain	Taiga Plains	Discontinuous	Low <10%	Thin <5m	Coniferous Forest	Paleozoic	Devonian	Lacustrine	Till Blanket	Mineral soil	<10%	Undulating	4-9%	Moderately well
Hans Ck	Anderson and West Arctic Ocean	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
Harris R	Upper Central Mackenzie	Hay River Lowland	Taiga Plains	Discontinuous	Low <10%	Thick >5m	Mixed forest	Paleozoic	Devonian	Alluvial	Till Blanket	Mineral soil	31-65%	Terraced	<4%	Imperfect
Harry Ch	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium	Thick >5m	Shrubland	Cenozoic	Quaternary	Alluvial	Alluvial Deposits	Mineral soil	<10%	Level	<4%	Imperfect
Heleva Ck	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Coarse grained (Glacio)Lacustrine	Mineral soil	31-65%	Inclined	4-9%	Moderately well
Hodgson Ck	Central Mackenzie	Franklin Mountains	Taiga Plains	Discontinuous	Medium	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Colluvial	Fine grained (Glacio)Lacustrine	Mineral soil	10-30%	Inclined	10-30%	Moderately well
Holmes Ck	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Glaciofluvial Complex	Mineral soil	10-30%	Rolling	4-9%	Imperfect

Table 5. continued.

Site Name	Tertiary Watershed	Ecoregion	Ecozone	Permafrost Extent	Ground Ice (in upper 20 m)	Overburden Thickness	Riparian Vegetation	Geological Era	Geological Period	Parent Material of Deposition	Surface Material (Surficial)	Kind of Material	Coarse Fragment Content (by volume)	Local Surface Form	Slope of the Surrounding Terrain	Drainage Attributes
Husky Ck	Anderson and West Arctic Ocean	Tuktoyaktuk Coastal Plain	Southern Arctic	Continuous	High >20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Glaciofluvial Complex	Mineral soil	10-30%	Rolling	4-9%	Imperfect
Jackfish Ck	Lower Mackenzie	Norman Range	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Coarse grained (Glacio)Lacustrine	Mineral soil	<10%	Hummocky (or irregular)	10-15%	Poor
Jean-Marie R1	Upper Mackenzie	Hay River Lowland	Taiga Plains	Sporadic	Low <10%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Coarse grained (Glacio)Lacustrine	Mineral soil	10-30%	Level	<4%	Poor
Jean-Marie R2	Upper Mackenzie	Hay River Lowland	Taiga Plains	Sporadic	Low <10%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Coarse grained (Glacio)Lacustrine	Mineral soil	10-30%	Level	<4%	Poor
Johnson R	Central Mackenzie	Mackenzie River Plain	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	10-30%	Hummocky (or irregular)	10-15%	Moderately well
Jungle Ridge Ck	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	31-65%	Inclined	4-9%	Moderately well
Kuluapuk Ch	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium 10-20%	Thick >5m	Shrubland	Cenozoic	Quaternary	Alluvial	Alluvial Deposits	Mineral soil	<10%	Level	<4%	Imperfect
Kumak Ch	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium 10-20%	Thick >5m	Shrubland	Cenozoic	Quaternary	Alluvial	Alluvial Deposits	Mineral soil	<10%	Level	<4%	Imperfect
Little Smith Ck	Central Mackenzie	Franklin Mountains	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Bog	Mesozoic	Cretaceous	Mesic sphagnum	Till Blanket	Organic soil	Non-applicable	Veneer bog	4-9%	Poor
Loon R	Lower Mackenzie	Norman Range	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	<10%	Hummocky (or irregular)	4-9%	Moderately well
Mackenzie R	Upper Mackenzie	Hay River Lowland	Taiga Plains	Discontinuous	Low <10%	Thick >5m	Mixed forest	Paleozoic	Devonian	Alluvial	Till Blanket	Mineral soil	31-65%	Terraced	<4%	Imperfect
Martin R	Upper Central Mackenzie	Hay River Lowland	Taiga Plains	Discontinuous	Low <10%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Coarse grained (Glacio)Lacustrine	Mineral soil	<10%	Undulating	<4%	Poor
Nadia Ck	Upper Mackenzie	Hay River Lowland	Taiga Plains	Discontinuous	Low <10%	Thick >5m	Mixed forest	Paleozoic	Devonian	Alluvial	Till Blanket	Mineral soil	31-65%	Terraced	<4%	Imperfect
Noell Ck	Anderson and West Arctic Ocean	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium 10-20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
North Nahanni R	Upper Central Mackenzie	Sibbeston Lake Plain	Taiga Plains	Discontinuous	Low <10%	Thin <5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Veneer	Mineral soil	<10%	Inclined	10-15%	Moderately well
Nola Ck	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	31-65%	Inclined	4-9%	Moderately well
Ochre R	Central Mackenzie	Franklin Mountains	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Colluvial	Fine grained (Glacio)Lacustrine	Mineral soil	10-30%	Inclined	10-30%	Moderately well
Oscar Ck	Lower Central Mackenzie	Mackenzie River Plain	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Mesozoic	Cretaceous	Lacustrine	Till Blanket	Mineral soil	<10%	Undulating	4-9%	Moderately well
Peekaya Ck	Upper Central Mackenzie	Horn Plateau	Taiga Plains	Discontinuous	Low <10%	Thick >5m	Bog	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	Non-applicable	Undulating	4-9%	Poor
Pettit R	Pettit	Northern Alberta Uplands	Taiga Plains	Sporadic	Low <10%	Thick >5m	Bog	Mesozoic	Cretaceous	Organic	Till Blanket	Organic soil	Non-applicable	Peat plateau bog	<4%	Poor
Poplar R	Lower Liard	Hay River Lowland	Taiga Plains	Sporadic	Low <10%	Thick >5m	Bog	Paleozoic	Devonian	Mesic sphagnum	Till Blanket	Organic soil	Non-applicable	Veneer bog	4-9%	Poor
Prohibition Ck	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Lacustrine	Till Blanket	Mineral soil	<10%	Undulating	4-9%	Poor
Rabbit Skin R	Upper Mackenzie	Hay River Lowland	Taiga Plains	Sporadic	Low <10%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Fine grained (Glacio)Lacustrine	Mineral soil	10-30%	Undulating	4-9%	Poor
River Blw 2 Mins	Central Mackenzie	Franklin Mountains	Taiga Plains	Discontinuous	Low <10%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Lacustrine	Till Blanket	Mineral soil	<10%	Level	<4%	Poor
RPR-001	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium 10-20%	Thick >5m	Shrubland	Cenozoic	Quaternary	Alluvial	Alluvial Deposits	Mineral soil	<10%	Level	<4%	Imperfect
RPR-005	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium 10-20%	Thick >5m	Shrubland	Cenozoic	Quaternary	Alluvial	Till Blanket	Mineral soil	<10%	Level	<4%	Imperfect
RPR-008	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium 10-20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
RPR-011	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium 10-20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Alluvial Deposits	Mineral soil	10-30%	Rolling	4-9%	Imperfect
RPR-012	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium 10-20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Alluvial	Alluvial Deposits	Mineral soil	<10%	Level	<4%	Imperfect
RPR-046	Anderson and West Arctic Ocean	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium 10-20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect

Table 5. continued.

Site Name	Tertiary Watershed	Ecoregion	Ecozone	Permafrost Extent	Ground ice (in upper 20 m)	Overburden Thickness	Riparian Vegetation	Geological Era	Geological Period	Parent Material of Deposition	Surface Material (Surficial)	Kind of Material	Coarse Fragment Content (by volume)	Local Surface Form	Slope of the Surrounding Terrain	Drainage Attributes
RPR-048	Anderson and West Arctic Ocean	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium 10-20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
RPR-059	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Continuous	High >20%	Thick >5m	Coniferous Forest	Cenozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
RPR-065	Anderson and West Arctic Ocean	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Shrubland	Cenozoic	Quaternary	Mesic woody sedge	Lacustrine Sand	Organic soil	Non-applicable	Polygonal peat plateau bog	<4%	Poor
RPR-069	Anderson and West Arctic Ocean	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Mesozoic	Cretaceous	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
RPR-070	Anderson and West Arctic Ocean	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Mesozoic	Cretaceous	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
RPR-075 (2005)	Anderson and West Arctic Ocean	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
RPR-075 (2007)	Anderson and West Arctic Ocean	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Cretaceous	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
RPR-099	Lower Mackenzie	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	10-15%	Imperfect
RPR-117	Lower Mackenzie	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	<10%	Hummocky (or irregular)	4-9%	Poor
RPR-271	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Low <10%	Thin <5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Veneer	Mineral soil	31-65%	Inclined	10-15%	Moderately well
RPR-403	Central Mackenzie	Franklin Mountains	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Lacustrine	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Level	<4%	Poor
RPR-481	Upper Mackenzie	Northern Alberta Uplands	Taiga Plains	Sporadic	Low <10%	Thick >5m	Bog	Mesozoic	Cretaceous	Bog	Till Blanket	Organic soil	Non-applicable	Peat plateau bog	<4%	Poor
Saline Ck	Central Mackenzie	Franklin Mountains	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Paleozoic	Cambrian-Ordovician	Lacustrine	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Level	<4%	Poor
Sandy Ck	Lower Mackenzie	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Glaciofluvial Complex	Mineral soil	10-30%	Rolling	10-15%	Imperfect
Smith Ck	Central Mackenzie	Franklin Mountains	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Lacustrine	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Level	<4%	Poor
South Snafu Ck	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Low <10%	Thin <5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	<10%	Hummocky (or irregular)	10-15%	Poor
Stanley Ck	Anderson and West Arctic Ocean	Tuktoyaktuk Coastal Plain	Southern Arctic	Continuous	High >20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
Steep Ck	Central Mackenzie	Franklin Mountains	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Mesozoic	Cambrian-Ordovician	Lacustrine	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Level	<4%	Poor
Thinahtea Ck	Petitot	Northern Alberta Uplands	Taiga Plains	Sporadic	Low <10%	Thick >5m	Bog	Mesozoic	Cretaceous	Organic	Till Blanket	Organic soil	Non-applicable	Peat plateau bog	<4%	Poor
Thunder R	Lower Mackenzie	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	10-15%	Imperfect
Tiede R	Lower Mackenzie	Norman Range	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Veneer	Mineral soil	<10%	Hummocky (or irregular)	4-9%	Moderately well
Travailant R (2005)	Lower Mackenzie	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	10-15%	Imperfect
Travailant R (2006)	Lower Mackenzie	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	10-15%	Imperfect
Trout R	Upper Mackenzie	Northern Alberta Uplands	Taiga Plains	Sporadic	Low <10%	Thick >5m	Bog	Mesozoic	Cretaceous	Bog	Till Blanket	Organic soil	Non-applicable	Peat plateau bog	<4%	Poor
Trout Rd Xing1	Upper Mackenzie	Hay River Lowland	Taiga Plains	Sporadic	Low <10%	Thick >5m	Bog	Paleozoic	Devonian	Bog	Till Blanket	Organic soil	Non-applicable	Peat plateau bog	<4%	Poor
Trout Rd Xing2	Upper Mackenzie	Northern Alberta Uplands	Taiga Plains	Sporadic	Low <10%	Thick >5m	Bog	Mesozoic	Cretaceous	Bog	Till Blanket	Organic soil	Non-applicable	Peat plateau bog	<4%	Poor
Trout Rd Xing3	Upper Mackenzie	Northern Alberta Uplands	Taiga Plains	Sporadic	Low <10%	Thick >5m	Mixed forest	Mesozoic	Cretaceous	Morainal	Till Blanket	Mineral soil	10-30%	Undulating	4-9%	Moderately well
Unnamed 01	Anderson and West Arctic Ocean	Tuktoyaktuk Coastal Plain	Southern Arctic	Continuous	High >20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
Unnamed 02	Anderson and West Arctic Ocean	Tuktoyaktuk Coastal Plain	Southern Arctic	Continuous	High >20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
Unnamed 03	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Continuous	High >20%	Thick >5m	Coniferous Forest	Mesozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect

Table 5. continued.

Site Name	Tertiary Watershed	Ecoregion	Ecozone	Permafrost Extent	Ground Ice (in upper 20 m)	Overburden Thickness	Riparian Vegetation	Geological Era	Geological Period	Parent Material of Deposition	Surface Material (Surficial)	Kind of Material	Coarse Fragment Content (by volume)	Local Surface Form	Slope of the Surrounding Terrain	Drainage Attributes
Unnamed 10	Lower Mackenzie	Fort MacPherson Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Fluvioglacial	Glaciofluvial Complex	Mineral soil	31-65%	Hummocky (or irregular)	10-15%	Well
Unnamed 16	Lower Mackenzie	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Mesozoic	Cretaceous	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	10-15%	Imperfect
Unnamed 41	Upper Central Mackenzie	Hom Plateau	Taiga Plains	Discontinuous	Low <10%	Thick >5m	Bog	Paleozoic	Devonian	Morainal	Till Blanket	Mineral soil	Non-applicable	Undulating	4-9%	Poor
Unnamed 4A	Upper Central Mackenzie	Hay River Lowland	Taiga Plains	Discontinuous	Low <10%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Lacustrine	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Level	<4%	Poor
Unnamed 4B	Upper Central Mackenzie	Hay River Lowland	Taiga Plains	Discontinuous	Low <10%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Lacustrine	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Level	<4%	Poor
Vermillion Ck	Lower Central Mackenzie	Norman Range	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Coarse grained (Glacio)Lacustrine	Mineral soil	31-65%	Inclined	4-9%	Moderately well
White Sand Ck	Central Mackenzie	Franklin Mountains	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Lacustrine	Fine grained (Glacio)Lacustrine	Mineral soil	<10%	Level	<4%	Poor
Willow Lake R	Upper Central Mackenzie	Hay River Lowland	Taiga Plains	Discontinuous	Low <10%	Thick >5m	Mixed forest	Paleozoic	Devonian	Alluvial	Alluvial Deposits	Mineral soil	31-65%	Terraced	<4%	Imperfect
Wood Bridge Ck	Lower Mackenzie	Great Bear Lake Plain	Taiga Plains	Continuous	High >20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Glaciofluvial Complex	Mineral soil	10-30%	Rolling	10-15%	Imperfect
Wigley R	Central Mackenzie	Mackenzie River Plain	Taiga Plains	Discontinuous	Medium 10-20%	Thick >5m	Coniferous Forest	Paleozoic	Devonian	Morainal	Glaciofluvial Plain	Mineral soil	10-30%	Hummocky (or irregular)	10-15%	Moderately well
Yaya R	Lower Mackenzie	Tuktoyaktuk Coastal Plain	Southern Arctic	Discontinuous	Medium 10-20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Till Blanket	Mineral soil	10-30%	Rolling	4-9%	Imperfect
Zed Ck	Anderson and West Arctic Ocean	Tuktoyaktuk Coastal Plain	Southern Arctic	Continuous	High >20%	Thick >5m	Tundra, high shrub	Cenozoic	Quaternary	Morainal	Glaciofluvial Complex	Mineral soil	10-30%	Rolling	4-9%	Imperfect

Table 6. *In situ* water quality characteristics of the 102 sampled in the Mackenzie River Valley following the Reference Condition Approach (2005-2007).

Site Name	Water Temperature (°C)	pH	Conductivity (µS/cm)	Specific Conductivity (µS/cm at 25°C)	Dissolved Oxygen ¹ (mg/L)	Turbidity (NTU)
Aklak Ch	11.0	8.2	246.9	— ²	—	37.6
Big Lake Ck	9.4	8.0	134.0	—	—	30.8
Big Smith Ck	6.7	8.0	1153.0	—	—	10.4
Billy Ck	10.9	8.2	561.8	360	10.2	2.9
Borrow 20.17	9.9	7.4	265.0	—	—	0.8
Bosworth Ck	8.7	8.4	645.7	677	7.7	0.5
Brackett R	7.7	8.3	716.1	—	—	20.0
Campbell Ck	9.1	7.2	81.8	—	—	22.6
Campbell R	11.9	8.3	194.6	—	10.4	7.2
Canyon Ck	10.0	8.5	645.1	677	10.4	0.5
Chick Ck	7.3	8.3	386.7	410	10.6	0.8
Cli Ck	10.0	8.1	200.3	—	—	9.8
Dahadinni R	3.9	7.6	300.1	—	—	61.3
Dam Ck	4.5	7.8	266.1	—	—	10.1
Dehtthih Dehe R	5.1	7.4	136.5	—	—	8.2
Dodo Ck	7.2	8.5	836.8	—	—	10.0
Donnelly R	10.7	8.7	740.6	775	10.7	1.6
Douglas Ck	10.4	6.8	170.6	—	—	172.6
East Ch	14.7	8.3	282.0	—	—	45.0
Elliot Ck	7.3	8.0	1163.0	1210	11.4	0.5
Fish Trap Ck	6.8	7.5	112.4	—	—	19.2
Francis Ck	9.0	8.4	867.0	905	10.0	1.7
Gossage Ck	5.2	8.0	241.3	—	—	21.5
Hanna R	7.7	8.1	312.4	335	12.0	3.1
Hans Ck	10.2	7.1	54.6	—	—	14.6
Harris R	9.2	8.0	258.1	—	—	9.0
Harry Ch	13.8	8.3	300.8	—	—	36.4
Heleva Ck	8.6	8.4	586.7	617	10.7	0.3
Hodgson Ck	8.2	8.0	398.5	—	—	11.0
Holmes Ck	11.1	7.4	57.2	—	—	3.5
Husky Ck	11.4	7.4	67.2	—	—	12.9
Jackfish Ck	10.0	7.6	250.0	269	7.7	0.5
Jean-Marie R1	10.5	7.8	222.8	—	—	1.8
Jean-Marie R2	8.2	8.0	277.9	—	—	11.0
Johnson R	6.4	8.1	283.7	—	—	133.0
Jungle Ridge Ck	8.5	8.3	1037.5	1080	11.1	1.1
Kuluarpak Ch	11.3	8.2	244.3	—	—	58.1
Kumak Ch	10.1	8.2	242.2	—	—	187.0
Little Smith Ck	7.0	8.2	457.7	—	—	15.7

¹ Questionable performance of the sampling device in each year (2006 values indicated close to anoxic conditions at all streams while 2005 values indicated saturation at all sites) resulted in the data being excluded from site descriptions and RCA modeling.

² dash line (—) indicates no data were recorded/measured.

Table 6. continued.

Site Name	Water Temperature (°C)	pH	Conductivity (µS/cm)	Specific Conductivity (µS/cm at 25°C)	Dissolved Oxygen ¹ (mg/L)	Turbidity (NTU)
Loon R	11.0	8.4	212.8	229	10.5	1.3
Mackenzie R	10.9	8.3	187.2	— ²	—	11.8
Martin R	6.6	7.9	251.1	—	—	21.2
Nadia Ck	8.6	8.1	266.3	—	—	0.6
Noell Ck	12.8	7.2	70.1	—	—	16.3
North Nahanni R	8.8	8.3	387.6	—	—	102.0
Nota Ck	7.0	8.3	1692.0	1740	110.0	3.1
Ochre R	10.0	8.5	417.7	—	—	5.9
Oscar Ck	9.8	8.2	528.9	556	10.2	4.0
Peekaya Ck	10.5	8.3	620.1	—	—	0.4
Petitot R	6.8	7.5	298.1	—	—	13.3
Poplar R	7.4	7.7	208.5	—	—	10.1
Prohibition Ck	8.8	8.3	971.7	1010	10.7	0.2
Rabbit Skin R	8.6	8.1	300.9	—	—	11.7
River Btw 2 Mtns	12.1	8.3	180.7	—	—	0.7
RPR-001	13.4	8.2	298.1	—	—	38.9
RPR-005	9.6	8.2	234.0	—	—	40.0
RPR-008	7.0	7.8	123.1	—	—	22.7
RPR-011	10.2	8.0	239.7	—	—	119.0
RPR-012	9.0	8.3	113.8	—	—	4.1
RPR-046	9.2	7.6	75.2	—	11.5	4.2
RPR-048	8.9	7.7	63.6	—	10.2	3.6
RPR-059	5.1	8.1	148.3	—	—	8.4
RPR-065	10.8	7.7	183.8	—	8.7	2.4
RPR-069	5.5	7.7	120.3	—	11.1	90.0
RPR-070	7.7	7.2	45.9	52	11.2	5.6
RPR-075 (2005)	9.1	7.3	45.4	49	10.1	3.8
RPR-075 (2007)	7.4	6.6	33.2	—	—	2.4
RPR-099	4.3	7.6	76.7	—	10.4	1.4
RPR-117	9.1	8.2	228.0	248	10.5	1.2
RPR-271	6.3	8.1	792.7	833	11.1	2.0
RPR-403	8.8	8.5	380.9	—	—	2.4
RPR-481	8.2	8.0	141.6	—	—	0.9
Saline Ck	5.9	8.0	340.1	—	—	11.4
Sandy Ck	10.3	7.8	99.7	—	—	13.5
Smith Ck	9.0	8.3	337.6	—	—	1.3
South Snafu Ck	8.6	8.3	355.1	374	10.8	0.6
Stanley Ck	12.7	7.5	72.6	—	—	10.0
Steep Ck	3.6	7.5	825.3	—	—	8.6
Thinahtea Ck	7.7	7.8	313.9	—	—	7.5
Thunder R	6.1	8.0	369.1	394	11.1	0.5

¹ Questionable performance of the sampling device in each year (2006 values indicated close to anoxic conditions at all streams while 2005 values indicated saturation at all sites) resulted in the data being excluded from site descriptions and RCA modeling.

² dash line (—) indicates no data were recorded/measured.

Table 6. continued.

Site Name	Water Temperature (°C)	pH	Conductivity (µS/cm)	Specific Conductivity (µS/cm at 25°C)	Dissolved Oxygen ¹ (mg/L)	Turbidity (NTU)
Tieda R	8.7	8.3	221.0	240	10.9	2.1
Travaillant R (2005)	9.7	7.8	90.3	100	10.8	1.2
Travaillant R (2006)	9.2	7.9	136.8	—	—	27.6
Trout R	9.8	7.9	133.6	—	—	10.1
Trout Rd Xing1	10.6	8.2	211.9	— ¹	—	2.4
Trout Rd Xing2	9.0	8.1	160.4	—	—	0.9
Trout Rd Xing3	7.6	7.3	72.3	—	—	0.8
Unnamed 01	7.0	6.5	84.6	—	—	84.7
Unnamed 02	8.1	6.5	67.7	—	—	4.1
Unnamed 03	7.6	6.6	103.0	—	—	5.8
Unnamed 10	5.2	8.2	257.9	—	11.9	1.5
Unnamed 16	7.6	6.8	83.0	—	—	9.5
Unnamed 41	7.9	8.0	146.4	—	—	0.8
Unnamed 4A	7.9	8.1	227.5	—	—	0.6
Unnamed 4B	8.1	8.2	230.2	—	—	0.6
Vermillion Ck	7.4	8.3	2116	2115	11.1	0.5
White Sand Ck	9.5	8.5	328.6	—	—	0.8
Willowlake R	12.3	8.2	683.5	—	—	5.0
Wood Bridge Ck	8.5	7.9	82.2	—	10.5	0.7
Wrigley R	7.0	8.1	405.1	—	—	55.7
Yaya R	10.6	7.3	121.3	—	—	10.8
Zed Ck	11.4	7.7	67.6	—	—	11.5

¹ dash line (—) indicates no data were recorded/measured.

² Questionable performance of the sampling device in each year (2006 values indicated close to anoxic conditions at all streams while 2005 values indicated saturation at all sites) resulted in the data being excluded from site descriptions and RCA modeling.

Table 7. Chemical analysis of water samples from the 102 streams sampled in the Mackenzie River Valley following the Reference Condition (2005-2007).

Site Name	Alkalinity (mg/L)	Colour	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Chlorine (mg/L)	Fluorine (mg/L)	Sulphate SO ₄ (mg/L)	Ammonia (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Nitrate_Nitrite (mg/L)	Total Nitrogen (mg/L)	Ortho - Phosphorous (mg/L)	Total Phosphorous (mg/L)	Total Dissolved Phosphorous (mg/L)	Total Organic Carbon (mg/L)
Akkak Ch	99.7	10.0	—	39	6.8	0.09	42	0.006	0.04	<0.005	—	0.2	0.002	0.033	0.003	3.8
Big Lake Ck	65.6	20.0	—	13	2.1	0.06	8.4	0.003	0.005	<0.005	—	0.38	<0.001	0.018	0.003	9.5
Big Smith Ck	199.0	50.0	—	<5	110	0.39	257	<0.002	0.005	<0.005	—	0.28	<0.001	0.004	<0.002	9.3
Billy Ck	103.0	35.0	0.38	6	3.6	—	—	—	—	—	<0.01	—	—	0.01	—	17
Borrow 20.17	8.0	25.0	—	<5	2.2	0.05	2.6	0.008	0.06	<0.005	—	<0.01	<0.001	0.005	0.002	8.2
Bosworth Ck	175.0	10.0	0.1815	<3	—	—	—	—	—	—	<0.01	—	—	<0.01	—	4.3
Brackett R	146.0	17.5	—	8	40	0.54	60	<0.002	<0.002	<0.005	—	0.23	<0.001	0.013	0.002	3.3
Campbell Ck	31.1	100.0	—	<5	1.1	0.08	8.7	0.014	0.012	<0.005	—	0.83	0.002	0.026	0.015	28.8
Campbell R	71.1	25.0	—	6	5.4	0.008	23.5	0.007	0.005	0.006	—	0.32	<0.001	0.01	0.002	10.1
Canyon Ck	199.0	5.0	0.413	<3	—	—	—	—	—	—	0.02	—	—	<0.01	—	4.4
Chick Ck	195.0	25.0	0.2475	<3	—	—	—	—	—	—	0.01	—	—	<0.01	—	10
Cli Ck	102.0	10.0	—	<5	0.6	0.03	8.7	<0.002	0.144	0.01	—	0.42	<0.001	<0.002	<0.002	4.8
Dahedinni R	118.0	65.0	—	22	0.9	0.1	45	<0.002	0.02	0.01	—	0.28	<0.001	0.028	<0.002	10.5
Dam Ck	139.0	55.0	—	37	0.5	0.08	14.9	<0.002	0.003	<0.005	—	0.4	<0.001	0.005	0.003	15
Dehthih Deha R	79.3	60.0	—	<5	0.2	0.03	1.3	<0.002	0.006	<0.005	—	0.41	<0.001	0.005	0.003	16.5
Dodo Ck	182.0	10.0	—	<5	108	0.1	100	<0.002	0.084	<0.005	—	0.16	<0.001	<0.002	<0.002	0.8
Donnelly R	49.6	10.0	0.4733	<3	—	—	—	—	—	—	<0.01	—	—	0.01	—	12.9
Douglas Ck	8.8	300.0	—	83	1.4	0.11	59	<0.002	0.012	0.015	—	0.77	0.003	0.143	0.012	27.3
East Ch	99.2	20.0	—	30	7.9	0.19	36	<0.002	0.024	0.012	—	0.28	<0.001	0.028	<0.002	6.6
Elliott Ck	160.0	30.0	0.7456	<3	—	—	—	—	—	—	0.2	—	—	0.01	—	9.4
Fish Trap Ck	58.2	50.0	—	6	1.7	0.05	3.4	0.011	0.005	<0.005	—	0.84	<0.001	0.015	0.005	18.4
Francis Ck	211.0	5.0	634	<3	—	—	—	—	—	—	0.1	—	—	<0.01	—	4.2
Gessage Ck	121.0	80.0	—	10	0.5	0.09	17.4	<0.002	0.012	<0.005	—	0.68	<0.001	0.012	0.005	20.3
Hanna R	113.0	45.0	0.2	<3	—	—	—	—	—	—	0.03	—	—	<0.01	—	11.3
Haas Ck	16.7	100.0	—	<5	1.5	0.07	6.8	<0.002	0.01	<0.005	—	0.61	<0.001	0.028	0.009	20.1
Harris R	120.0	90.0	—	12	1.3	0.07	45	0.046	<0.002	0.008	—	0.78	<0.001	0.022	0.007	24.8
Harry Ch	107.0	20.0	—	15	7.9	0.14	49	<0.002	0.038	<0.005	—	0.21	<0.001	0.02	<0.002	4.8
Helevis Ck	217.0	15.0	388	<3	—	—	—	—	—	—	<0.01	—	—	<0.01	—	9.2
Hodgson Ck	181.0	15.0	—	<5	1.7	0.15	47	<0.002	0.105	0.012	—	0.2	<0.001	<0.002	<0.002	2.9
Holmes Ck	24.6	75.0	—	<5	3.3	0.08	2.7	<0.002	0.009	0.008	—	0.53	0.002	0.024	0.009	15.9
Husky Ck	26.8	70.0	—	<5	1.9	0.1	6.7	<0.002	0.01	<0.005	—	0.62	0.002	0.033	0.013	18.1
Jackfish Ck	143.0	30.0	0.1615	3	—	—	—	—	—	—	<0.01	—	—	<0.01	—	14.6
Jean-Marie R1	121.0	65.0	—	<5	1.7	0.04	6.8	0.006	0.01	0.016	—	0.5	<0.001	0.008	0.004	17.5
Jean-Marie R2	147.0	60.0	—	6	1.8	0.04	8.8	<0.002	0.01	0.014	—	0.43	<0.001	0.006	0.002	15.1
Johnson R	138.0	50.0	—	71	1.2	0.05	23.4	<0.002	0.01	0.01	—	0.33	<0.001	0.056	0.002	12.1
Jungle Ridge Ck	226.0	20.0	678	<3	—	—	—	—	—	—	<0.01	—	—	<0.01	—	10.6
Kukwapaik Ch	99.8	10.0	—	61	6.8	0.08	43	0.005	0.041	<0.005	—	0.2	0.001	0.051	0.003	3.7
Kumak Ch	100.0	10.0	—	497	6.7	0.09	42	0.006	0.042	0.012	—	0.27	0.002	0.4	0.003	3.9
Little Smith Ck	201.0	20.0	—	<5	3.4	0.32	62	<0.002	0.037	<0.005	—	0.22	<0.001	0.008	<0.002	5.3
Loon R	103.0	15.0	0.1363	<3	—	—	—	—	—	—	0.03	—	—	0.01	—	12.6

dash line (—) indicates no data were recorded/measured.

Table 7. continued.

Site Name	Alkalinity (mg/L)	Colour	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Chlorine (mg/L)	Fluorine (mg/L)	Sulphate SO ₄ (mg/L)	Ammonia (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Nitrate_Nitrite (mg/L)	Total Nitrogen (mg/L)	Ortho - Phosphorous (mg/L)	Total Phosphorous (mg/L)	Total Dissolved Phosphorous (mg/L)	Total Organic Carbon (mg/L)
Mackenzie R	83.0	10.0	—	12	7.5	0.08	26	<0.002	0.009	0.008	—	0.02	<0.001	0.014	0.002	4.5
Martin R	124.0	90.0	—	<5	0.5	0.1	16.5	<0.002	0.007	0.014	—	0.57	<0.001	0.013	0.005	20.1
Nadia Ck	122.0	90.0	—	<5	3.8	0.09	43	0.354	0.005	0.005	—	0.96	0.002	0.013	0.008	33.3
Noell Ck	22.7	20.0	—	<5	1.7	0.09	12.2	<0.002	<0.002	<0.005	—	0.21	<0.001	0.011	<0.002	6.3
North Nahanni R	148.0	7.5	—	<5	3.3	0.2	96	0.048	0.127	0.005	—	<0.01	<0.001	0.044	<0.002	1.4
Nota Ck	375.0	20.0	1290	<3	—	—	—	—	—	—	0.43	—	—	<0.01	—	42
Ochre R	177.0	25.0	—	<5	28	0.09	54	0.009	0.024	0.005	—	0.19	<0.001	0.004	<0.002	4.3
Oscar Ck	153.0	35.0	0.3379	4	—	—	—	—	—	—	0.02	—	—	0.01	—	11.4
Peekaya Ck	197.0	35.0	—	<5	9.7	<0.01	192	<0.002	0.01	0.008	—	0.36	<0.001	0.004	0.003	9.8
Petilot R	106.0	130.0	—	<5	0.4	0.11	54	<0.002	0.006	0.016	—	0.84	0.003	0.027	0.016	30
Poplar R	116.0	55.0	—	9	0.6	0.02	2.8	<0.002	0.008	0.019	—	0.54	<0.001	0.009	0.002	16
Prohibition Ck	216.0	5.0	728	<3	—	—	—	—	—	—	<0.01	—	—	<0.01	—	6.8
Rabbit Skin R	154.0	65.0	—	8	2.2	0.59	37	0.002	0.004	0.012	—	0.69	<0.001	0.02	0.008	23
River Btw 2 Mtns	85.7	40.0	—	<5	0.4	0.07	21.8	0.002	0.003	<0.005	—	0.33	<0.001	0.005	0.003	10.3
RPR-001	106.0	20.0	—	18	7.1	0.12	41	0.074	0.035	0.01	—	0.22	<0.001	0.022	<0.002	4.6
RPR-005	98.3	10.0	—	37	7	0.09	41	0.004	0.025	0.009	—	0.2	<0.001	0.034	0.002	3.8
RPR-008	57.1	7.5	—	53	9.1	0.1	10.7	0.048	0.012	0.009	—	0.56	<0.001	0.046	0.003	4.4
RPR-011	102.0	10.0	—	218	7.7	0.11	40	0.005	0.027	<0.005	—	0.26	<0.001	0.149	0.003	3.3
RPR-012	125.0	10.0	—	<5	303	0.21	43	0.01	<0.002	0.012	—	0.42	<0.001	0.01	0.005	8.7
RPR-046	25.9	40.0	—	<5	1.9	0.08	17.4	0.027	0.008	0.007	—	0.5	0.004	0.027	0.013	11.9
RPR-048	24.3	10.0	—	<5	1.8	0.08	12	0.007	0.005	<0.005	—	0.21	<0.001	0.012	0.004	5.7
RPR-059	33.5	25.0	—	<5	1.1	0.12	10	0.005	0.005	<0.005	—	0.51	<0.001	0.015	0.005	18.4
RPR-065	43.7	80.0	—	<5	0.8	0.08	5.1	0.02	0.005	<0.005	—	0.67	0.001	0.017	0.007	20.7
RPR-069	36.6	125.0	—	<5	3.9	0.08	12.4	0.014	0.005	0.005	—	0.58	0.003	0.021	0.013	19.8
RPR-070	16.1	65.0	58	22	1.2	—	3	—	—	—	<0.01	—	—	0.02	—	17.9
RPR-075 (2005)	19.0	20.0	38	<3	0.9	—	2	—	—	—	<0.01	—	—	0.02	—	10.4
RPR-075 (2007)	23.3	10.0	—	<5	0.9	0.05	3	0.004	0.055	<0.005	—	0.47	<0.001	0.017	0.005	8.5
RPR-090	33.8	60.0	—	<5	0.9	0.06	1.1	0.006	0.005	<0.005	—	0.51	0.001	0.013	0.008	18
RPR-117	114.0	10.0	138	<3	1.6	—	12	—	—	—	<0.01	—	—	<0.01	—	14.4
RPR-271	178.0	10.0	0.5058	<3	—	—	—	—	—	—	0.02	—	—	<0.01	—	3.7
RPR-481	225.0	25.0	—	<5	0.3	0.08	34	0.001	0.052	0.005	—	0.23	<0.001	<0.002	<0.002	4.8
Saline Ck	96.9	65.0	—	<5	0.4	0.06	1.5	0.001	0.004	<0.005	—	0.38	<0.001	0.004	0.003	16.6
Sandy Ck	243.0	17.5	—	<5	813	<0.01	154	<0.002	0.082	<0.005	—	0.19	<0.001	<0.002	<0.002	2.2
Smith Ck	44.5	25.0	—	<5	1.9	0.04	9.4	0.007	0.039	<0.005	—	0.38	<0.001	0.005	0.002	10.9
South Snafu Ck	228.0	30.0	—	<5	0.2	0.07	7.8	0.009	0.026	0.005	—	0.27	<0.001	0.003	0.003	7.7
Stanley Ck	165.0	45.0	0.2269	<3	—	—	—	—	—	—	0.03	—	—	<0.01	—	13.4
Steep Ck	23.3	40.0	—	<5	1.7	0.08	13.1	<0.002	0.005	0.01	—	0.38	<0.001	0.012	0.004	12.2
Steep Ck	241.0	5.0	—	<5	22	1.3	204	<0.002	0.109	<0.005	—	0.12	<0.001	<0.002	<0.002	<0.5

dash line (—) indicates no data were recorded/measured.

Table 7. continued.

Site Name	Alkalinity (mg/L)	Colour	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Chlorine (mg/L)	Fluorine (mg/L)	Sulphate SO ₄ (mg/L)	Ammonia (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Nitrate_Nitrite (mg/L)	Total Nitrogen (mg/L)	Ortho - Phosphorous (mg/L)	Total Phosphorous (mg/L)	Total Dissolved Phosphorous (mg/L)	Total Organic Carbon (mg/L)
Thinshee Ck	179.0	80.0	—	<5	0.8	0.08	4.5	<0.002	0.004	0.006	—	0.53	<0.001	0.009	0.005	23.6
Thunder R	148.0	15.0	230	<3	1.4	—	57	—	—	—	<0.01	—	—	0.01	—	22.4
Tieda R	101.0	20.0	0.1419	3	—	—	—	—	—	—	0.04	—	—	<0.01	—	8.5
Travailant R (2005)	38.1	30.0	70	<3	3.5	—	4	—	—	—	<0.01	—	—	0.01	—	15
Travailant R (2006)	66.0	20.0	—	11	2	0.06	8.3	0.002	0.003	<0.005	—	0.38	<0.001	0.015	0.003	9.6
Trout R	72.6	50.0	—	<5	0.5	0.05	4.2	<0.002	<0.002	<0.005	—	0.41	<0.001	0.009	0.004	14.4
Trout Rd Xing1	140.0	50.0	—	<5	0.8	0.06	3.1	0.115	0.008	0.005	—	0.34	<0.001	0.008	0.003	11.7
Trout Rd Xing2	109.0	55.0	—	<5	0.5	0.07	2	0.117	0.005	0.006	—	0.37	<0.001	0.003	0.003	14.9
Trout Rd Xing3	51.7	90.0	—	<5	<0.1	0.06	0.9	0.042	0.003	0.006	—	0.39	<0.001	0.004	0.004	19.5
Unnamed 01	44.4	35.0	—	<5	3.9	0.07	5.3	0.029	0.005	0.006	—	0.7	0.006	0.124	0.019	14.9
Unnamed 02	31.9	55.0	—	42	1.3	0.05	9.6	0.04	0.005	<0.005	—	0.53	0.005	0.033	0.017	13.8
Unnamed 03	58.2	55.0	—	<5	1.4	0.09	8.7	0.07	0.005	<0.005	—	0.08	0.003	0.032	0.013	19.4
Unnamed 10	130.0	17.5	—	<5	0.9	0.08	23.1	<0.002	0.007	<0.005	—	0.32	<0.001	0.004	0.002	10.1
Unnamed 16	31.3	25.0	—	<5	3.5	0.07	18.6	0.009	0.006	<0.005	—	0.34	<0.001	0.011	0.003	9.2
Unnamed 41	87.8	100.0	—	<5	0.2	0.05	11.5	0.025	<0.002	<0.005	—	0.45	<0.001	0.003	0.004	21.1
Unnamed 4A	97.9	100.0	—	<5	0.9	0.06	47	0.398	<0.002	0.006	—	0.54	0.001	0.006	0.006	25.1
Unnamed 4B	98.1	100.0	—	<5	1	0.06	49	0.445	<0.002	0.005	—	0.58	<0.001	0.006	0.005	25.1
Vermilion Ck	205.0	5.0	1860	<3	—	—	—	—	—	—	<0.01	—	—	<0.01	—	2.4
White Sand Ck	194.0	10.0	—	<5	5.2	0.11	19.7	<0.002	0.029	0.014	—	0.15	<0.001	<0.002	<0.002	2.6
Willowlake R	120.0	45.0	—	6	164	0.18	53	0.042	0.004	<0.005	—	0.4	<0.001	0.008	0.004	11.7
Wood Bridge Ck	41.5	30.0	—	<5	3.1	0.06	3.5	0.008	0.006	<0.005	—	0.42	<0.001	0.006	0.004	13.1
Wigley R	172.0	55.0	—	44	18.1	0.11	24.7	<0.002	0.036	<0.005	—	0.31	<0.001	0.033	<0.002	10.6
Yaya R	50.3	25.0	—	<5	7.4	0.1	3.7	<0.002	0.021	0.018	—	0.39	0.001	0.015	0.005	7.7
Zed Ck	27.3	17.5	—	<5	4.2	0.06	5.3	<0.002	0.007	<0.005	—	0.5	<0.001	0.018	0.005	9.4

dash line (—) indicates no data were recorded/measured.

Table 8. Metals and major cations (mg/L) of water samples from the 102 streams sampled in the Mackenzie River Valley following the Reference Condition Approach (2005-2007).

Site Name	Hardness	Ag	Al	As	B	Ba	Be	Bi	Br	Ca	Cd	Co	Cr	Cu	Fe	K	Li	Mg
Aldak Ch	139	<0.00002	1.728	0.0008	0.02	0.088	0.000001	<0.00002	<0.05	38.8	0.00003	0.000551	0.0018	0.00389	1.5	1.3	0.0057	10.8
Big Lake Ck	88.9	0.00004	0.343	0.0007	0.015	0.0556	0.000005	<0.00002	<0.05	17.8	0.00004	0.000253	0.0005	0.0112	0.762	1.4	0.0026	4.8
Big Smith Ck	452	<0.00002	0.0181	0.0008	0.074	0.0616	<0.0000002	<0.00002	0.05	136	0.00005	0.000246	<0.0002	0.00217	0.307	<0.1	0.0238	22.791
Billy Ck	274	<0.0001	0.036	0.0008	—	0.0523	<0.0001	—	—	80.2	<0.0001	0.0001	0.0004	0.0011	0.162	1	0.0027	18
Borrow 20.17	14	<0.00002	0.0459	0.0003	0.01	0.0202	0.000015	<0.00002	<0.05	3.1	0.00002	0.000106	0.0003	0.00283	0.17	0.6	0.00138	1.4
Bosworth Ck	306	<0.0001	0.008	0.0003	—	0.069	<0.0001	—	—	78.9	<0.0001	<0.0001	<0.0003	0.0013	<0.05	1	0.0082	25.9
Brackett R	212	0.00131	0.266	0.0015	0.026	0.0588	0.000019	0.00007	<0.05	47.4	0.00018	0.000223	0.0004	0.076	0.369	1.4	0.0113	22.173
Campbell Ck	46.3	0.00003	0.168	0.0008	0.01	0.0268	0.000046	<0.00002	<0.05	11.1	0.00005	0.000243	0.0004	0.00243	1.5	0.7	0.00366	3.52
Campbell R	91.8	<0.00002	0.313	0.0005	0.02	0.0478	0.000016	<0.00002	0.05	24.5	0.00002	0.000157	0.0006	0.00699	0.4	1.3	0.00388	6.7
Canyon Ck	344	<0.0001	0.0159	0.0003	—	0.0486	<0.0001	—	—	90.1	<0.0001	<0.0001	<0.0003	0.0009	<0.05	1.1	0.0089	29
Chick Ck	208	<0.0001	<0.03	0.0002	—	0.0626	<0.0001	—	—	61.8	<0.0001	<0.0001	<0.0003	0.0008	0.056	0.4	0.0021	13.2
Cili Ck	99.6	0.00002	0.0292	0.0003	0.01	0.0368	<0.000002	<0.00002	<0.05	21.9	<0.00001	0.000081	<0.0002	0.0032	0.045	0.9	0.00129	9.8
Dahadimi R	165	0.00004	1.924	0.0007	0.01	0.0637	0.000055	<0.00002	<0.05	43.8	0.00002	0.000725	0.0015	0.00381	1.48	1.2	0.0033	10.996
Dam Ck	152	0.00005	0.0367	0.0005	0.005	0.0443	0.000005	0.00008	<0.05	40.1	0.00006	0.000117	<0.0002	0.00203	0.178	0.5	0.00161	10.6
Deftthih Dehe R	78.8	0.00003	0.0187	0.0004	0.003	0.0347	0.000013	<0.00002	<0.05	21.6	<0.00001	0.000072	<0.0002	0.00195	0.264	0.2	0.0016	4.82
Dodo Ck	278	0.00007	0.021	0.0004	0.044	0.0645	<0.000002	0.00014	<0.05	65.2	0.00003	0.000109	<0.0002	0.00687	0.01	1.3	0.00922	24.198
Donnelly R	375	<0.0001	0.078	0.0007	—	0.0465	<0.0001	—	—	121	<0.0001	0.0002	0.001	0.0006	0.139	0.5	0.0042	17.8
Douglas Ck	74.1	0.005	4.42	0.03	0.03	0.079	0.0005	—	<0.05	18.8	0.003	0.008	0.007	0.011	7.87	2	—	7
East Ch	131	0.00007	0.332	0.0008	0.015	0.0821	0.000019	0.00002	<0.05	33.7	0.0001	0.000269	0.0006	0.00615	0.711	1.1	0.00479	8.21
Elliot Ck	653	<0.0001	<0.03	0.0008	—	0.0402	<0.0001	—	—	240	<0.0001	0.0001	0.0005	0.001	0.111	0.7	0.0039	13.2
Fish Trap Ck	63.4	0.00004	0.138	0.0005	0.009	0.0365	0.000008	0.00072	<0.05	17.3	0.00004	0.000147	0.0002	0.00175	0.516	0.6	0.00192	4.17
Francis Ck	489	<0.0001	0.0037	0.0003	—	0.0453	<0.0001	—	—	128	<0.0001	<0.0001	<0.0003	0.001	<0.05	1.3	0.0091	36.4
Gossage Ck	141	0.00003	0.186	0.0005	0.011	0.045	0.000013	<0.00002	<0.05	34.8	0.00009	0.000219	0.0003	0.008	0.269	1.3	0.00303	1027
Hanna R	148	<0.0001	0.0134	0.0003	—	0.0651	<0.0001	—	—	43.8	<0.0001	<0.0001	<0.0003	0.0008	<0.05	0.6	0.002	8.8
Hans Ck	30.8	0.00002	0.773	0.0013	0.008	0.0409	0.000083	0.00003	<0.05	7.7	0.00007	0.000991	0.0013	0.00341	2.71	0.8	0.00307	3
Harris R	158	<0.00002	0.284	0.0007	0.04	0.0278	0.000018	<0.00002	<0.05	43.1	0.00002	0.000234	0.0006	0.00369	0.79	0.9	0.00442	13.1
Hary Ch	141	0.00002	0.599	0.0008	0.015	0.0673	0.000021	0.00004	<0.05	38	0.00004	0.000351	0.0008	0.00288	0.517	0.9	0.00565	11.346
Heleva Ck	297	<0.0001	0.0036	0.0003	—	0.0581	<0.0001	—	—	85.5	<0.0001	<0.0001	<0.0003	0.002	<0.05	1	0.0072	20.3
Hodgson Ck	220	0.00003	0.0349	0.0007	0.011	0.0829	0.000008	<0.00002	<0.05	53.3	0.005	0.000121	<0.0002	0.00327	0.056	0.6	0.00452	19.3
Holmes Ck	29.3	0.00002	0.147	0.0011	0.009	0.0376	0.00002	<0.00002	<0.05	7.2	0.00003	0.000196	0.0004	0.00456	0.955	0.8	0.00195	2.4
Husky Ck	38.2	0.00002	0.0999	0.0011	0.009	0.0405	0.000027	<0.00002	<0.05	9.2	0.00005	0.00022	0.0003	0.00278	1.28	0.7	0.00289	8
Jackfish Ck	140	<0.0001	0.0019	0.0005	—	0.126	<0.0001	—	—	39.4	<0.0001	<0.0001	<0.0003	<0.0003	0.179	0.2	0.0016	10.1
Jean-Marie R1	125	<0.00002	0.074	0.0004	0.01	0.0552	<0.000002	<0.00002	<0.05	39.3	<0.00001	0.000086	0.0002	0.00613	0.3	0.03	0.00242	0.013
Jean-Marie R2	151	0.00003	0.0435	0.0005	0.016	0.0726	0.000006	<0.00002	<0.05	41.4	<0.00001	0.000111	<0.0002	0.00223	0.282	0.6	0.00316	9.21
Johnson R	156	0.00004	3.128	0.0015	0.016	0.0702	0.000108	<0.00002	<0.05	42.3	0.00001	0.00132	0.0035	0.0101	2.94	1.8	0.00487	11.07
Jungle Ridge Ck	390	<0.0001	0.0056	0.0005	—	0.081	<0.0001	—	—	109	<0.0001	<0.0001	<0.0003	0.0041	<0.05	0.8	0.0104	28.3
Kuluarpak Ch	148	0.00004	2.386	0.0011	0.02	0.085	0.00009	<0.00002	<0.05	40.4	0.00005	0.000928	0.0035	0.00549	2.69	1.7	0.00647	11.4
Kumak Ch	235	0.00009	10.28	0.0038	0.03	0.297	0.000306	0.00005	<0.05	64.5	0.00029	0.00385	0.0113	0.0171	11.8	3.8	0.0124	20.2
Little Smith Ck	263	0.00002	0.127	0.0003	0.014	0.0654	0.000012	0.00002	<0.05	58.1	0.00003	0.000149	<0.0002	0.00251	0.19	1	0.00738	27.146
Loon R	112	<0.0001	<0.03	0.0004	—	0.0456	<0.0001	—	—	32.3	<0.0001	<0.0001	<0.0003	0.0007	0.074	0.8	0.0022	7.7

dash line (—) indicates no data were recorded/measured.

Table 8. continued.

Site Name	Hardness	Ag	Al	As	B	Ba	Be	Bi	Br	Ca	Cd	Ce	Cr	Cu	Fe	K	Li	Mg
Mackenzie R	102	<0.0002	0.55	0.0004	0.02	0.0429	0.000017	<0.00002	<0.05	30.2	0.00001	0.000223	0.0007	0.00329	0.53	1.3	0.00486	7.2
Marlin R	136	0.00004	0.184	0.0007	0.013	0.0819	0.000015	<0.00002	<0.05	34.2	<0.00001	0.000209	0.0004	0.004	0.774	0.8	0.00265	10.338
Nadia Ck	168	<0.00002	0.0285	0.0003	0.02	0.0208	0.000003	<0.00002	<0.05	41.5	<0.00001	0.000073	<0.0002	0.00162	0.11	1.2	0.00413	15.7
Noell Ck	29.2	0.00002	0.134	0.0004	0.014	0.0392	0.000007	<0.00002	<0.05	8	0.00001	0.000118	0.0002	0.00201	0.369	1.2	0.00353	1.99
North Nahanni R	235	0.00003	4.761	0.0009	0.02	0.111	0.000132	<0.00002	<0.05	64.1	0.00013	0.0013	0.0049	0.00689	3.33	2	0.0101	20
Nota Ck	721	<0.0001	0.0021	0.0005	—	0.157	<0.0000002	—	—	186	<0.0001	0.0002	<0.0003	0.0087	<0.05	1.8	0.18	62.2
Ochre R	212	<0.00002	0.172	0.0003	0.02	0.0633	0.000009	<0.00002	<0.05	55.8	<0.00001	0.000144	0.0004	0.00424	0.21	1.1	0.01	19.7
Oscar Ck	205	0.0001	0.063	0.0005	—	0.0792	<0.0000002	—	—	59.4	<0.0001	<0.0001	0.0004	0.0024	0.237	0.6	0.0045	13.9
Peekaya Ck	364	<0.00002	0.0238	0.0003	0.03	0.0671	0.000002	<0.00002	<0.05	109	<0.00001	0.000136	<0.0002	0.00244	0.1	1.4	0.00881	26.8
Petilot R	184	0.0001	0.102	0.0008	0.01	0.0216	0.000011	<0.00002	<0.05	43.7	0.00002	0.000198	0.0003	0.00334	0.749	0.5	0.00947	11.9
Poplar R	114	0.00003	0.0295	0.0003	0.008	0.0608	0.000006	<0.00002	<0.05	30.8	<0.00001	0.000102	<0.0002	0.00171	0.317	0.5	0.00197	7.46
Prohibition Ck	519	<0.0001	0.0038	0.0005	—	0.048	<0.0001	—	—	143	0.00006	<0.0001	<0.0003	0.0018	<0.05	1.4	0.0157	39.4
Rabbit Skin R	180	<0.00002	0.471	0.0006	0.01	0.0421	0.000017	<0.00002	<0.05	49.5	0.00001	0.000257	0.0007	0.00333	0.71	1.4	0.00672	14.6
River Btw 2 Mtns	102	<0.00002	0.0329	0.0003	0.01	0.0327	<0.0000002	<0.00002	<0.05	26.7	<0.00001	0.000055	<0.0002	0.0019	0.38	0.7	0.00302	9.2
RPR-001	139	<0.00002	0.699	0.0008	0.016	0.0686	0.000033	0.00005	<0.05	38.2	0.00006	0.000385	0.001	0.00258	0.963	1.2	0.00548	11.146
RPR-005	134	0.00002	1.73	0.0008	0.02	0.089	0.000046	<0.00002	0.05	39.2	0.00004	0.000503	0.0018	0.00689	1.39	1.3	0.0054	10.7
RPR-008	69.5	0.00003	1.47	0.0007	0.02	0.0775	0.000048	<0.00002	0.06	16.5	0.00002	0.000548	0.0023	0.0043	1.5	1.5	0.00601	6.1
RPR-011	194	0.00006	8.034	0.0031	0.03	0.196	0.000259	0.00004	<0.05	55.1	0.00024	0.0031	0.0093	0.00952	8.95	3.1	0.11	16.3
RPR-012	267	<0.00002	0.129	0.0024	0.01	0.19	0.00001	<0.00002	1.23	69.6	<0.00001	0.000243	0.0082	0.00625	0.21	1.9	0.0112	33.5
RPR-046	39.8	<0.00002	0.103	0.0007	0.02	0.035	0.000011	<0.00002	<0.05	9.7	<0.00001	0.000173	0.0003	0.00847	1.05	1	0.00444	3.3
RPR-048	32.4	<0.00002	0.143	0.0004	0.02	0.0382	0.000008	<0.00002	<0.05	8.1	0.00001	0.000195	0.0003	0.00704	0.58	1.2	0.00349	2.6
RPR-059	42.3	0.00002	0.109	0.0005	<0.01	0.0281	0.000028	<0.00002	0.08	9.5	0.00002	0.000491	0.0004	0.00238	1.16	0.7	0.00539	4.2
RPR-065	54.8	<0.00002	0.13	0.0004	0.01	0.0174	0.000015	<0.00002	<0.05	12.8	<0.00001	0.000243	0.0005	0.00299	0.87	0.4	0.00181	4.9
RPR-069	48.9	0.00003	0.312	0.0008	0.02	0.0373	0.000021	<0.00002	0.07	11.2	<0.00001	0.000198	0.0006	0.00966	8	0.7	0.00307	4.3
RPR-070	22.7	<0.0001	0.135	0.0005	—	0.0292	<0.0001	—	—	5.8	<0.0001	0.0001	0.0014	0.0013	0.808	0.4	0.0017	2
RPR-075 (2005)	22.1	<0.00002	0.053	0.0004	—	0.0284	<0.0000002	—	—	5.9	<0.0001	<0.0001	0.0014	0.0007	0.438	0.5	0.0015	1.8
RPR-075 (2007)	24.7	<0.0001	0.0757	0.0002	<0.01	0.0263	0.000005	<0.00002	<0.05	6	<0.00001	0.000085	0.0002	0.00222	0.4	0.8	0.00165	2
RPR-099	38.2	<0.00002	0.0578	0.0005	0.01	0.0282	0.000012	<0.00002	<0.05	9.2	<0.00001	0.000079	0.0003	0.00357	0.48	1	0.0015	3.1
RPR-117	100	<0.0001	0.015	0.0003	—	0.0649	<0.0001	—	—	27.7	<0.0001	<0.0001	<0.0003	0.0011	0.059	1.6	0.003	7.5
RPR-271	435	<0.0001	0.0392	0.0003	—	0.0644	<0.0001	—	—	118	<0.0001	<0.0001	<0.0003	0.0005	0.081	1	0.0049	34
RPR-403	253	<0.00002	0.0322	0.0002	<0.01	0.0789	<0.0000002	<0.00002	<0.05	73.3	0.00001	0.000096	<0.0002	0.0026	0.025	0.8	0.00406	18
RPR-481	101	<0.00002	0.058	0.0003	<0.01	0.0382	0.000005	<0.00002	<0.05	31.3	0.00001	0.000071	<0.0002	0.0156	0.27	0.4	0.002	5.8
Saline Ck	402	0.00003	0.0077	0.0005	0.024	0.0784	<0.0000002	0.00006	0.11	92.6	0.00041	0.00016	<0.0002	0.0039	0.026	0.9	0.0121	38.174
Sandy Ck	47.3	<0.00002	0.0147	0.0002	0.012	0.0285	0.000005	<0.00002	<0.05	12	0.00001	0.000032	<0.0002	0.00557	0.062	1.1	0.00154	3.8
Smith Ck	233	0.00002	0.0859	0.0003	0.02	0.125	0.000006	<0.00002	<0.05	69	<0.00001	0.000118	<0.0002	0.00338	0.19	0.7	0.00225	15.3
South Snafu Ck	189	0.0001	<0.03	0.0003	—	0.0443	<0.0001	—	—	53.2	<0.0001	<0.0001	<0.0003	0.0003	0.068	0.5	0.0027	13.7
Stanley Ck	32.2	0.00008	0.0453	0.0004	0.014	0.0271	0.000003	<0.00002	<0.05	8.2	0.00005	0.000073	<0.0002	0.00327	0.341	1.2	0.0041	2.4
Sleep Ck	440	0.00004	0.0145	0.0002	0.034	0.0214	<0.0000002	0.00007	<0.05	93.5	0.00003	0.000132	<0.0002	0.00298	0.019	1.8	0.0421	49.271

dash line (—) indicates no data were recorded/measured.

Table 8. continued.

Site Name	Hardness	Ag	Al	As	B	Ba	Be	Bi	Br	Ca	Cd	Co	Cr	Cu	Fe	K	Li	Mg
Thinshiea Ck	181	0.00008	0.0553	0.0005	0.005	0.0278	0.000007	<0.00002	<0.05	53	<0.00001	0.000172	0.0003	0.0153	0.284	0.8	0.00381	10.4
Thunder R	183	<0.0001	0.0051	<0.0002	—	0.0581	<0.0001	—	—	51.6	<0.0001	<0.0001	<0.0003	0.001	<0.05	1.2	0.0034	13.2
Tieda R	115	<0.0001	0.113	0.0003	—	0.0458	<0.0001	—	—	33.7	<0.0001	0.0002	0.001	0.001	0.112	0.7	0.0016	7.8
Trevaillant R (2005)	42.8	<0.0001	<0.03	0.0004	—	0.0348	<0.0001	—	—	11.7	<0.0001	<0.0001	0.0014	0.0009	8	0.7	0.0016	3.3
Trevaillant R (2007)	68.8	0.00003	0.233	0.0005	0.014	0.0537	0.000033	<0.00002	<0.05	18.1	0.00001	0.000202	0.0003	0.00705	0.885	1.5	0.00245	4.82
Trout R	70.2	0.00003	0.0206	0.0004	0.007	0.0274	0.000005	<0.00002	<0.05	22.2	<0.00001	0.00008	<0.0002	0.00247	0.083	0.5	0.00179	4.53
Trout Rd Xing1	140	<0.00002	0.0737	0.0003	0.03	0.0887	0.000007	<0.00002	<0.05	45.5	0.00002	0.000104	<0.0002	0.00313	0.36	0.8	0.00251	7.3
Trout Rd Xing2	110	<0.00002	0.0479	0.0003	0.03	0.0444	0.000005	<0.00002	<0.05	34.8	<0.00001	0.000086	<0.0002	0.00546	<0.05	0.5	0.00172	6
Trout Rd Xing3	57.5	0.00003	0.0555	0.0003	0.02	0.0282	0.000005	<0.00002	<0.05	16.3	<0.00001	0.000062	<0.0002	0.0108	0.21	0.1	0.00189	2.3
Unnamed 01	53.8	0.00003	2.988	0.0023	0.02	0.0873	0.000102	0.00003	0.05	12.1	0.00004	0.00108	0.0039	0.00705	4.29	2.4	0.00484	5.3
Unnamed 02	41.9	<0.00002	0.12	0.0008	<0.01	0.0301	0.000016	<0.00002	<0.05	9.7	0.00001	0.000252	0.0004	0.00591	1.37	0.8	0.00295	3.8
Unnamed 03	88.9	<0.00002	0.0974	0.0007	<0.01	0.0282	0.00001	<0.00002	0.08	16.3	<0.00001	0.000304	0.0005	0.00374	1.48	1	0.00357	5.7
Unnamed 10	140	<0.00002	0.0954	0.0003	0.02	0.0904	0.000005	<0.00002	<0.05	43.3	<0.00001	0.000129	0.0003	0.00362	0.21	1.8	0.0041	9.7
Unnamed 16	44.1	<0.00002	0.335	0.0003	0.02	0.0332	0.000034	<0.00002	0.05	10.4	0.00001	0.00158	0.0004	0.00634	1.85	0.9	0.00485	3.7
Unnamed 41	97.7	<0.00002	0.0432	0.0003	0.04	0.0282	0.000006	<0.00002	<0.05	25.6	<0.00001	0.000064	<0.0002	0.00233	0.42	0.4	0.00185	8.2
Unnamed 4A	121	<0.00002	0.0852	0.0003	0.03	0.0258	0.000011	<0.00002	<0.05	30.4	<0.00001	0.000078	0.0003	0.00172	0.23	0.5	0.00315	11
Unnamed 4B	120	<0.00002	0.0294	0.0004	0.03	0.0267	0.000009	<0.00002	<0.05	30	<0.00001	0.00007	<0.0002	0.00171	0.19	0.8	0.00317	10.7
Vermilion Ck	1200	<0.00002	0.032	0.0008	—	0.0228	<0.000002	—	—	405	0.00014	0.00124	<0.0003	0.003	<0.05	1.7	0.0282	48.3
White Sand Ck	204	<0.00002	0.126	0.0002	0.01	0.0881	<0.000002	<0.00002	<0.05	58.8	0.00001	0.000114	0.0002	0.0108	0.14	0.8	0.0045	17
Willow Lake R	165	<0.00002	0.191	0.0005	0.03	0.0625	0.000012	<0.00002	0.18	47.9	0.00002	0.000213	<0.0002	0.00245	0.36	1.5	0.0144	13.5
Wood Bridge Ck	45.4	<0.00002	0.0492	0.0003	0.01	0.0322	0.000008	<0.00002	0.05	11.4	<0.00001	0.000051	0.0003	0.00388	0.14	1	0.00155	3.5
Wigley R	185	0.00005	1.828	0.0023	0.021	0.0707	0.000067	<0.00002	<0.05	49.2	0.00003	0.000681	0.0018	0.00457	1.88	1.5	0.00542	12.749
Yaya R	53.9	0.00003	0.0552	0.0007	0.014	0.0557	0.000002	0.00017	<0.05	13.5	0.00004	0.0002	<0.0002	0.00184	0.895	1.1	0.003	3.77
Zed Ck	30.4	0.00005	0.0381	0.0004	0.01	0.0381	<0.000002	<0.00002	<0.05	7.7	0.00002	0.00008	<0.0002	0.00552	0.218	1.2	0.00213	2.49

dash line (—) indicates no data were recorded/measured.

Table 8. continued.

Site Name	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Br	Ti	Tl	U	V	Zn
Aklat Ch	0.0222	0.00106	0.227	0.00378	0.00058	0.08	0.000131	0.0006	2.04	0.000123	0.00001	0.028	0.000049	0.000081	0.00443	0.0091
Big Lake Ck	0.0201	0.00096	3.2	0.00257	0.00036	2.9	0.000158	0.0007	1.59	0.00112	0.0488	0.006	0.00001	0.000083	0.00099	0.0039
Big Smith Ck	0.0738	0.00089	85.9	0.00407	0.00005	91.8	0.000046	0.0011	1.77	0.00019	1.729	<0.002	0.000028	0.000796	0.00099	0.0018
Billy Ck	0.0036	0.0008	8.1	0.0016	<0.0001	—	<0.0001	<0.001	—	—	1.02	0.0008	<0.0001	0.0003	0.0062	<0.01
Borrow 20.17	0.0116	0.00015	1.2	0.0033	0.00013	0.85	0.00041	0.0004	0.43	0.000235	0.0147	<0.002	0.000022	0.000038	0.00012	0.0031
Bosworth Ck	0.0028	0.0016	19	0.0009	<0.0001	—	<0.0001	<0.001	—	—	1.36	0.0011	<0.0001	0.0009	0.0002	0.0011
Brackett R	0.0145	0.0016	72.2	0.00713	0.00033	22.9	0.000842	0.0014	1.57	0.0002	1.794	0.005	0.000012	0.000759	0.00089	0.0251
Campbell Ck	0.0284	0.00025	1.9	0.00491	0.00016	3.13	0.00007	0.0006	2.17	0.00023	0.0417	0.003	0.004	0.000049	0.00062	0.0034
Campbell R	0.0105	0.00088	5.3	0.00322	0.00016	7.53	0.000087	0.0005	1.8	0.000175	0.00001	0.009	0.000035	0.00027	0.00108	0.0037
Canyon Ck	0.0006	0.0019	6.1	0.0027	<0.0001	—	<0.0001	0.0009	—	—	2.02	0.0001	<0.0001	0.00205	0.0003	0.0019
Chick Ck	0.001	0.0004	1.1	0.0013	<0.0001	—	<0.0001	<0.001	—	—	0.108	0.0003	<0.0001	0.0004	0.0001	<0.01
Cl Ck	0.00127	0.00074	4.4	0.00165	0.00004	4.35	0.000047	0.0003	1.81	0.00011	0.211	<0.002	<0.000002	0.000293	0.00023	0.0011
Dehadinini R	0.0225	0.00089	2.3	0.00554	0.0005	16.4	0.000121	0.0003	4.98	0.00002	0.312	0.018	0.000023	0.000556	0.00325	0.007
Dam Ck	0.00661	0.00037	0.9	0.00245	0.00009	4.87	0.000133	0.0002	1.5	0.00014	0.111	<0.002	<0.000002	0.000225	0.0003	0.0117
Dehithin Deha R	0.00835	0.00023	1.1	0.00128	<0.00001	0.72	0.000047	0.0003	4	0.00001	0.043	<0.002	<0.000002	0.000084	0.00022	0.0012
Dodo Ck	0.000275	0.00081	78.2	0.00252	0.03	33.8	0.000082	0.0008	1.37	0.00148	0.978	<0.002	0.000007	0.00088	0.0001	0.0028
Donnelly R	0.0026	0.0005	3.2	0.0015	<0.0001	—	0.0001	<0.001	—	—	1.28	0.0077	<0.0001	0.0002	0.0003	<0.0001
Douglas Ck	0.06	0.005	6.5	0.02	0.03	21.5	0.03	0.03	0.54	0.03	0.057	0.038	—	—	0.02	0.054
East Ch	0.0148	0.001	8	0.00271	0.00043	13.3	0.000157	0.0008	2.41	0.00028	0.214	0.008	0.000015	0.000808	0.00123	0.0088
Elliot Ck	0.0058	0.0014	5.4	0.0024	<0.0001	—	<0.0001	0.001	—	—	2.04	0.0017	<0.0001	0.001	0.0002	<0.01
Fish Trap Ck	0.0278	0.00084	1.6	0.00175	0.03	1.31	0.000048	0.0004	1.32	0.00039	0.0478	0.002	0.000009	0.000078	0.00043	0.0021
Francis Ck	0.0008	0.0085	7.7	0.0034	<0.0001	—	<0.0001	0.0029	—	—	0.861	0.0002	<0.0001	0.00492	0.0003	0.0023
Gossage Ck	0.00803	0.00047	1.7	0.00463	0.00016	5.97	0.000076	0.0004	1.84	0.00008	0.0989	0.023	<0.000002	0.000293	0.00067	0.0043
Hanza R	0.0009	0.0003	7.6	0.0012	<0.0001	—	<0.0001	<0.001	—	—	0.112	0.0008	<0.0001	4	0.0003	0.0005
Hart Ck	0.132	0.0005	1.8	0.00478	0.0008	2.41	0.00008	0.0005	3.13	0.00007	0.0285	0.013	0.000017	0.000134	0.00263	0.0105
Harris R	0.0407	0.00035	6.3	0.00251	0.00021	14.3	0.000042	0.0003	4.79	0.000087	0.161	0.003	0.000011	0.000187	0.00105	0.004
Harry Ch	0.0164	0.00111	8.8	0.00286	0.00052	18	0.000135	0.0009	1.69	0.0001	2	0.002	0.00002	0.000981	0.00218	0.0045
Heleva Ck	0.0004	0.0022	10.4	0.0018	<0.0001	—	<0.0001	0.001	—	—	0.282	0.0001	<0.0001	0.00272	0.0003	0.0013
Hodgson Ck	0.00236	0.00098	2.8	0.00283	0.00022	16.4	0.000097	0.0004	1.87	0.00014	0.987	<0.002	0.000043	0.00144	0.00019	0.0121
Holmes Ck	0.0294	0.005	2.1	0.0174	0.03	1.16	0.000053	0.0012	0.82	0.00009	0.0252	0.004	0.000007	0.000087	0.00084	<0.0001
Husky Ck	0.0506	0.00055	1.8	0.00362	0.00019	2.23	0.000088	0.0005	1.44	0.0001	0.0303	0.003	0.000005	0.000063	0.00051	0.0038
Jackfish Ck	0.0139	0.0004	0.5	0.0007	<0.0001	—	<0.0001	<0.001	—	—	0.0778	<0.0001	<0.0001	0.0001	0.0003	0.0004
Jean-Marie R1	0.0121	0.00022	3.7	0.00182	0.00006	8	0.000042	<0.0002	3.87	0.000851	0.131	0.004	0.000012	0.000102	0.00027	0.0039
Jean-Marie R2	0.0168	0.00037	5.3	0.00285	0.00009	3.91	0.000055	0.0004	2.74	<0.00001	0.15	<0.002	<0.000002	0.000188	0.00029	0.0018
Johnson R	0.0498	0.00053	5.1	0.0138	0.00112	8.45	0.000141	0.0003	6.91	0.005	0.163	0.024	0.000039	0.00047	0.00677	0.0093
Jungle Ridge Ck	0.0034	0.0015	70.9	0.0014	<0.0001	—	<0.0001	0.0006	—	—	1.36	0.0005	<0.0001	0.00102	0.0003	0.0012
Kukukpak Ch	0.0346	0.00116	7	0.00508	0.00097	12.9	0.000163	0.0007	7.44	0.000182	0.285	0.051	0.000084	0.000745	0.00748	0.0141
Kumak Ch	0.162	0.00233	7.3	0.0141	0.00408	13.4	0.000263	0.0008	18.9	0.000148	0.344	0.123	0.000158	0.00109	0.0252	0.0501
Little Smith Ck	0.00882	0.00072	4.7	0.00234	0.00011	20.5	0.000054	0.0007	2.01	0.00051	0.508	0.002	0.000011	0.00141	0.00039	0.0172
Loun R	0.0092	0.0003	1	0.0009	<0.0001	—	<0.0001	<0.001	—	—	0.0831	0.0003	<0.0001	<0.0001	0.0002	<0.01

dash line (—) indicates no data were recorded/measured.

Table 8. continued.

Site Name	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn
Mackenzie R	0.0098	0.00068	8.2	0.00258	0.00018	8.35	0.000094	0.0003	2.85	0.000117	0.181	0.014	0.000037	0.000382	0.0013	0.0037
Martin R	0.0276	0.00034	5.5	0.00301	0.00018	6.32	0.000081	0.0003	3.58	0.03	0.134	0.004	0.000003	0.000221	0.00077	0.002
Nadia Ck	0.00761	0.00007	7.5	0.00146	<0.00001	14.6	0.000034	<0.0002	7.47	0.000158	0.173	<0.002	0.000018	0.000052	0.00016	0.0023
Nisail Ck	0.0107	0.00032	2.8	0.00127	0.00011	3.68	0.000052	0.0004	0.85	0.0001	0.0302	0.004	0.000008	0.000044	0.00047	0.0022
North Nahanni R	0.0334	0.00295	8.2	0.00973	0.00119	30.1	0.000163	0.0007	9.6	0.000069	1.47	0.077	0.000094	0.00201	0.00974	0.0212
Norta Ck	0.0468	0.0025	123	0.0039	<0.0001	—	<0.0001	0.0014	—	—	0.754	0.0005	<0.0001	0.00506	0.0005	0.0028
Ochive R	0.00584	0.00051	25	0.00305	0.00008	18.6	0.00005	0.0004	1.95	0.000199	0.803	0.004	0.000037	0.000591	0.00055	0.0043
Oscar Ck	0.0156	0.001	29.1	0.0017	<0.0001	—	<0.0001	<0.001	—	—	0.673	0.0014	<0.0001	0.0005	0.0003	<0.01
Peekaya Ck	0.0157	0.00108	16.7	0.00377	<0.00001	70.1	0.000026	<0.0002	3.02	0.000184	1.46	0.002	0.000033	0.00103	0.00011	0.0032
Perlot R	0.0172	0.00032	3.8	0.00321	0.00015	19.8	0.000081	0.0003	1.07	0.0001	0.127	0.003	<0.000002	0.000328	0.00068	0.0027
Poplar R	0.0196	0.00035	3.3	0.00183	0.00008	1.68	0.000038	0.0002	5	0.00013	0.0841	<0.002	<0.000002	0.00014	0.00028	0.0017
Prohibition Ck	0.0003	0.0008	15.4	0.0058	<0.0001	—	<0.0001	0.0034	—	—	2.13	0.0002	<0.0001	0.00801	0.0003	0.0025
Rabbit Skin R	0.0162	0.00038	10.2	0.00315	0.0002	12.4	0.000056	0.0003	4.38	0.000483	0.214	0.017	0.000023	0.000313	0.00127	0.0043
River Bow 2 Miles	0.00754	0.00042	8.4	0.00189	<0.00001	6.93	0.000027	0.001	1.82	0.000106	0.278	0.008	0.000028	0.000189	0.00017	0.0007
RPR-061	0.0165	0.00117	8.1	0.00294	0.00052	15.4	0.000149	0.0008	3.53	0.00008	0.245	0.012	0.000022	0.000983	0.00246	0.0046
RPR-065	0.0204	0.0011	7.2	0.00401	0.00058	12.7	0.000138	0.0005	5.14	0.000247	0.281	0.038	0.000045	0.000688	0.00424	0.0077
RPR-066	0.0288	0.00039	6	0.00286	0.00052	3.62	0.000068	0.0004	2.67	0.000084	0.0804	0.018	0.000043	0.000201	0.00434	0.0084
RPR-011	0.119	0.00152	7.4	0.0115	0.00328	12.7	0.000248	0.0007	14.9	0.000131	0.322	0.105	0.000133	0.000945	0.0211	0.038
RPR-012	0.0129	0.00132	158	0.0166	0.00012	14.6	0.000148	0.0074	0.35	0.000443	0.583	0.004	0.000012	0.000482	0.00045	0.0085
RPR-048	0.0234	0.00074	3.7	0.00253	0.00014	5.63	0.000074	0.0003	0.35	0.000122	0.0439	0.004	0.000015	0.000046	0.0005	0.0028
RPR-048	0.0252	0.0004	2.7	0.00146	0.00011	3.82	0.000046	<0.0002	0.58	0.000269	0.0375	0.008	0.000015	0.000031	0.00049	0.0055
RPR-059	0.117	0.00035	4.8	0.01	0.00008	4.3	0.000072	0.0005	2.83	0.000118	0.0654	<0.002	0.000008	0.000049	0.00035	0.0048
RPR-065	0.0186	<0.00005	1.2	0.00285	0.00007	1.92	0.000034	0.0002	0.47	0.000124	0.0421	0.01	0.00001	0.000007	0.00055	0.0039
RPR-066	0.0308	0.00012	5.6	0.00331	0.00036	4.2	0.000047	0.0004	1.21	0.000257	0.0533	0.009	0.000023	0.00002	0.00116	0.0037
RPR-070	0.0338	<0.00005	1.5	0.002	0.0002	—	<0.0001	<0.001	—	—	0.0198	0.001	<0.0001	<0.0001	0.0004	<0.01
RPR-075 (2005)	0.0448	<0.00005	0.8	0.001	0.0001	—	<0.0001	<0.001	—	—	0.0197	0.0004	<0.0001	<0.0001	0.0002	<0.01
RPR-075 (2007)	0.0285	0.00006	1.3	0.00142	0.00008	1.03	0.000024	<0.0002	0.23	0.000194	0.034	0.003	0.000006	<0.000002	0.00023	0.0028
RPR-266	0.0178	0.00013	0.8	0.00243	0.00008	0.44	0.000038	0.0002	0.63	0.00016	0.0325	<0.002	0.000006	0.00002	0.00028	0.0034
RPR-117	0.0085	0.0002	7.9	0.0008	<0.0001	—	<0.0001	<0.001	—	—	0.0799	0.0005	<0.0001	<0.0001	0.0002	0.0009
RPR-271	0.0147	0.0017	4.1	0.001	<0.0001	—	<0.0001	0.0005	—	—	1.2	0.0011	<0.0001	0.0008	0.0003	0.0014
RPR-403	0.00177	0.00136	1.5	0.0031	<0.00001	11.5	0.000038	0.0003	2.09	0.000317	1.15	<0.002	0.000026	0.00215	0.00016	0.0103
RPR-481	0.00701	0.00038	2.1	0.00212	0.00019	0.64	0.000033	<0.0002	2.97	0.000363	0.0771	<0.002	<0.000002	0.00005	0.00019	0.0031
Galina Ck	0.00489	0.00047	581	0.00295	0.00008	52.9	0.000111	0.0024	1.74	0.00021	0.584	<0.002	0.000009	0.00149	<0.00005	0.0018
Sandy Ck	0.0048	0.00009	3.2	0.00159	0.00013	3.17	0.000027	0.0004	0.87	0.00008	0.0352	<0.002	<0.000002	0.000021	0.00008	0.0016
Smith Ck	0.0146	0.00047	1.2	0.00284	0.00003	2.81	0.000061	0.0002	2.3	0.000344	0.455	0.004	0.000005	0.00067	0.00022	0.004
South Snailu Ck	0.0032	0.0002	<0.0001	0.0007	<0.0001	—	<0.0001	<0.001	—	—	0.128	0.0006	<0.0001	0.0004	0.0001	<0.01
Stanley Ck	0.0289	0.00135	2.8	0.00188	0.00012	4.04	0.00007	0.0002	0.84	0.00045	0.0302	<0.002	0.000003	0.00008	0.00021	0.0038
Threat Ck	0.000347	0.00177	18.1	0.00258	0.00007	87.9	0.000038	0.0008	2.85	0.0002	1794	<0.002	0.000012	0.00142	0.00007	0.0034

dash line (—) indicates no data were recorded/measured.

Table 8. continued.

Site Name	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn
Thinehes Ck	0.0329	0.00199	2.8	0.00775	0.00017	2.07	0.000154	0.0003	1.42	0.00161	0.129	<0.002	<0.000002	0.000593	0.00033	0.0023
Thunder R	0.0276	0.0018	6	0.0013	<0.0001	—	<0.0001	0.0004	—	—	0.132	0.0001	<0.0001	0.0008	0.0002	0.0007
Tiede R	0.0028	0.0005	1.2	0.0016	<0.0001	—	<0.0001	<0.001	—	—	0.0731	0.0115	<0.0001	0.0002	0.0003	0.0013
Travailant R (2005)	0.0238	<0.0001	2.4	0.0012	<0.0001	—	<0.0001	<0.001	—	—	0.0296	0.0002	<0.0001	<0.0001	0.0002	<0.01
Travailant R (2007)	0.0162	0.00019	3.1	0.00293	0.00025	2.88	0.000042	0.0004	1.54	0.00015	0.0484	0.005	0.000008	0.000058	0.0007	0.0028
Trout R	0.00693	0.0003	2.1	0.00186	0.00004	1.69	0.000054	0.0003	1.44	<0.00001	0.054	<0.002	<0.000002	0.000073	0.00022	0.0007
Trout Rd Xing1	0.0148	0.00056	2.6	0.00195	0.00012	1.1	0.000035	<0.0002	2.85	0.000354	0.0927	0.003	0.000006	0.000178	0.0003	0.0034
Trout Rd Xing2	0.0589	0.00032	2.2	0.00174	0.00014	0.8	0.000029	<0.0002	3.05	0.000083	0.0744	0.002	<0.000002	0.00007	0.00021	0.0027
Trout Rd Xing3	0.0154	0.00038	1.8	0.0019	0.00013	0.18	0.000225	<0.0002	2.85	0.000167	0.0467	<0.002	0.000002	0.00003	0.00017	0.0038
Unnamed 01	0.141	0.00114	<0.1	0.00607	0.00202	2.04	0.000212	0.0008	6.17	0.000156	0.0533	0.058	0.000047	0.000165	0.00827	0.013
Unnamed 02	0.0554	0.00051	1.6	0.00394	0.00202	3.2	0.000086	0.0004	0.67	0.000158	0.0395	0.004	0.00001	0.000049	0.00063	0.0038
Unnamed 03	0.19	0.00017	2.7	0.00347	0.00018	3.14	0.000081	0.0004	0.55	0.000171	0.0768	0.003	0.000008	0.000016	0.00041	0.0047
Unnamed 10	0.0824	0.00063	8	0.00303	0.00004	7.89	0.00004	0.0003	1.11	0.000166	0.161	0.003	0.000011	0.000197	0.00028	0.005
Unnamed 16	0.0685	0.00012	5.1	0.0054	0.00017	5.92	0.000042	0.0003	0.94	0.000136	0.0572	0.009	0.000022	0.000014	0.00083	0.0074
Unnamed 41	0.00605	0.00017	3	0.00152	0.00003	3.86	0.000033	<0.0002	3.38	0.000209	0.0598	<0.002	0.000003	0.000104	0.00016	0.0021
Unnamed 4A	0.00825	0.0001	16.1	0.00163	0.00004	14.8	0.000044	<0.0002	3.55	0.000112	0.136	<0.002	0.000008	0.000037	0.00029	0.002
Unnamed 4B	0.00601	0.00009	16	0.0017	<0.00001	14.6	0.000045	0.0002	3.46	0.000098	0.143	<0.002	0.000007	0.000039	0.00017	0.0006
Vermilion Ck	0.0087	0.0031	45.8	0.0219	<0.0001	—	<0.0001	0.0024	—	—	7.02	0.0003	<0.0001	0.00384	0.0003	0.0135
White Sand Ck	0.00308	0.00072	5.8	0.00287	0.00015	60	0.000033	0.0003	1.86	0.000107	0.851	0.005	0.00003	0.000733	0.00036	0.0044
Willow Lake R	0.0933	0.00078	103	0.00225	0.00009	17.1	0.000034	0.0006	1.6	0.000114	0.386	0.003	0.000018	0.000299	0.00048	0.0034
Wood Bridge Ck	0.00774	0.00015	2.4	0.00175	0.00006	1.22	0.000029	0.0002	0.57	0.000102	0.041	<0.002	0.000015	0.000017	0.00021	0.0042
Wigley R	0.0379	0.00107	20.3	0.00414	0.00083	8.96	0.000163	0.0004	5.05	0.00003	0.357	0.017	0.000028	0.000491	0.00336	0.0055
Yaya R	0.0531	0.00038	5.4	0.00132	0.00009	1.36	0.000075	0.0006	0.46	0.00021	0.0443	<0.002	<0.000002	0.000035	0.00024	0.0017
Zed Ck	0.0338	0.0015	2.3	0.00201	0.00011	1.73	0.000061	0.0004	0.38	0.00061	0.0252	0.004	0.000003	0.000019	0.00017	0.0022

dash line (—) indicates no data were recorded/measured.

Table 9. Maximum, minimum, and mean air temperature (°C) over 15 years from weather stations in the vicinity of the 102 streams sampled in the Mackenzie River Valley following the Reference Condition Approach (2005-2007).

Site Name	Best Station	Next Best Station	Region	January			February			March			April			May			June		
				Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)
Alak Ch	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
Big Lake Ck	Little Chicago	—	GSA	-23.88	-31.48	-27.70	-20.10	-29.50	-24.83	-15.40	-27.80	-21.84	-0.85	-14.81	-7.84	10.84	-0.20	5.22	20.12	8.38	14.28
Big Smith Ck	Tulika	—	SSA	-22.00	-29.89	-25.91	-18.57	-27.21	-22.93	-12.94	-24.28	-18.67	1.12	-11.08	-5.01	11.97	0.12	6.05	21.15	9.05	15.12
Billy Ck	Norman Wells A	—	SSA	-22.51	-30.35	-26.45	-18.69	-27.89	-23.32	-13.44	-24.93	-19.21	1.11	-11.33	-5.13	12.11	0.69	6.41	21.10	9.44	15.34
Borrow 20.17	Storm Hills	—	ISR	-23.48	-28.05	-23.30	-20.60	-26.99	-23.80	-20.34	-26.68	-23.58	-11.82	-18.20	-15.07	-3.98	-9.80	-6.93	13.97	4.00	9.11
Bosworth Ck	Norman Wells A	—	SSA	-22.51	-30.35	-26.45	-18.69	-27.89	-23.32	-13.44	-24.93	-19.21	1.11	-11.33	-5.13	12.11	0.69	6.41	21.10	9.44	15.34
Brackett R	Tulika	—	SSA	-22.00	-29.89	-25.91	-18.57	-27.21	-22.93	-12.94	-24.28	-18.67	1.12	-11.08	-5.01	11.97	0.12	6.05	21.15	9.05	15.12
Campbell Ck	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-26.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
Campbell R	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-26.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
Canyon Ck	Norman Wells A	—	SSA	-22.51	-30.35	-26.45	-18.69	-27.89	-23.32	-13.44	-24.93	-19.21	1.11	-11.33	-5.13	12.11	0.69	6.41	21.10	9.44	15.34
Chick Ck	Fl Good Hope A	—	SSA	-23.83	-32.14	-28.10	-19.86	-29.15	-24.56	-14.63	-26.02	-20.33	-0.34	-13.82	-7.10	10.71	-1.03	4.82	20.89	8.90	14.89
Cli Ck	Little Doctor Lk	—	DEC	-20.44	-30.67	-25.59	-16.52	-29.00	-22.78	-7.75	-22.77	-15.29	4.28	-10.07	-2.91	13.90	-0.34	6.80	20.90	6.18	13.57
Dahadinni R	Wrigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
Dam Ck	Wrigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
Dehthih Deho R	Trout Lake	—	DEC	-15.51	-27.24	-21.41	-8.15	-24.52	-16.88	-4.33	-20.09	-12.22	6.77	-8.10	-0.66	12.92	-0.78	6.08	19.32	5.76	12.57
Dodo Ck	Norman Wells A	—	SSA	-22.51	-30.35	-26.45	-18.69	-27.89	-23.32	-13.44	-24.93	-19.21	1.11	-11.33	-5.13	12.11	0.69	6.41	21.10	9.44	15.34
Donnelly R	Fl Good Hope A	—	GSA	-23.83	-32.14	-28.10	-19.86	-29.15	-24.56	-14.63	-26.02	-20.33	-0.34	-13.82	-7.10	10.71	-1.03	4.82	20.89	8.90	14.89
Douglas Ck	Trail Valley	—	SSA	-21.18	-27.99	-24.60	-20.76	-28.61	-24.72	-19.59	-28.50	-24.09	-8.23	-18.46	-13.36	1.13	-7.43	-3.16	15.24	3.46	9.37
East Ck	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
Elliot Ck	Norman Wells A	—	SSA	-22.51	-30.35	-26.45	-18.69	-27.89	-23.32	-13.44	-24.93	-19.21	1.11	-11.33	-5.13	12.11	0.69	6.41	21.10	9.44	15.34
Fish Trap Ck	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-26.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
Francis Ck	Norman Wells A	—	SSA	-22.51	-30.35	-26.45	-18.69	-27.89	-23.32	-13.44	-24.93	-19.21	1.11	-11.33	-5.13	12.11	0.69	6.41	21.10	9.44	15.34
Gossage Ck	Little Chicago	—	SSA	-23.88	-31.48	-27.70	-20.10	-29.50	-24.83	-15.40	-27.80	-21.84	-0.85	-14.81	-7.84	10.84	-0.20	5.22	20.12	8.38	14.28
Hanna R	Fl Good Hope A	—	SSA	-23.83	-32.14	-28.10	-19.86	-29.15	-24.56	-14.63	-26.02	-20.33	-0.34	-13.82	-7.10	10.71	-1.03	4.82	20.89	8.90	14.89
Hans Ck	Trail Valley	—	ISR	-21.18	-27.99	-24.60	-20.76	-28.61	-24.72	-19.59	-28.50	-24.09	-8.23	-18.46	-13.36	1.13	-7.43	-3.16	15.24	3.46	9.37
Harrie R	Fl Simpson A	—	DEC	-20.18	-28.85	-24.54	-14.49	-25.01	-19.77	-7.04	-19.78	-13.43	6.47	-8.44	0.03	15.20	2.31	8.78	22.19	9.16	15.69
Harry Ck	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
Helewa Ck	Norman Wells A	—	SSA	-22.51	-30.35	-26.45	-18.69	-27.89	-23.32	-13.44	-24.93	-19.21	1.11	-11.33	-5.13	12.11	0.69	6.41	21.10	9.44	15.34
Hodgson Ck	Wrigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
Holmes Ck	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
Husky Ck	Storm Hills	—	ISR	-20.48	-28.05	-23.30	-20.60	-26.99	-23.80	-20.34	-26.68	-23.58	-11.82	-18.20	-15.07	-3.98	-9.80	-6.93	13.97	4.00	9.11
Jackfish Ck	Fl Good Hope A	—	SSA	-23.83	-32.14	-28.10	-19.86	-29.15	-24.56	-14.63	-26.02	-20.33	-0.34	-13.82	-7.10	10.71	-1.03	4.82	20.89	8.90	14.89
Jean-Marie R1	Jean-Marie	Fl Simpson A	DEC	-20.18	-28.85	-24.54	-14.49	-25.01	-19.77	-7.04	-19.78	-13.43	6.47	-8.44	0.03	15.20	2.31	8.78	22.19	9.16	15.69
Jean-Marie R2	Jean-Marie	Fl Simpson A	DEC	-20.18	-28.85	-24.54	-14.49	-25.01	-19.77	-7.04	-19.78	-13.43	6.47	-8.44	0.03	15.20	2.31	8.78	22.19	9.16	15.69
Johnson R	Wrigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
Jungle Ridge Ck	Tulika	—	SSA	-22.00	-29.89	-25.91	-18.57	-27.21	-22.93	-12.94	-24.28	-18.67	1.12	-11.08	-5.01	11.97	0.12	6.05	21.15	9.05	15.12
Kuluapak Ch	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
Kumek Ch	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
Little Smith Ck	Tulika	—	SSA	-22.00	-29.89	-25.91	-18.57	-27.21	-22.93	-12.94	-24.28	-18.67	1.12	-11.08	-5.01	11.97	0.12	6.05	21.15	9.05	15.12
Loon R	Fl Good Hope A	—	SSA	-23.83	-32.14	-28.10	-19.86	-29.15	-24.56	-14.63	-26.02	-20.33	-0.34	-13.82	-7.10	10.71	-1.03	4.82	20.89	8.90	14.89
Mackenzie R	Fl Simpson A	—	DEC	-20.18	-28.85	-24.54	-14.49	-25.01	-19.77	-7.04	-19.78	-13.43	6.47	-8.44	0.03	15.20	2.31	8.78	22.19	9.16	15.69
Martin R	Fl Simpson A	—	DEC	-20.18	-28.85	-24.54	-14.49	-25.01	-19.77	-7.04	-19.78	-13.43	6.47	-8.44	0.03	15.20	2.31	8.78	22.19	9.16	15.69
Nadia Ck	Fl Simpson A	—	DEC	-20.18	-28.85	-24.54	-14.49	-25.01	-19.77	-7.04	-19.78	-13.43	6.47	-8.44	0.03	15.20	2.31	8.78	22.19	9.16	15.69
Noeli Ck	Trail Valley	—	ISR	-21.18	-27.99	-24.60	-20.76	-28.61	-24.72	-19.59	-28.50	-24.09	-8.23	-18.46	-13.36	1.13	-7.43	-3.16	15.24	3.46	9.37
North Nahanni R	Little Doctor Lk	—	DEC	-20.44	-30.67	-25.59	-16.52	-29.00	-22.78	-7.75	-22.77	-15.29	4.28	-10.07	-2.91	13.90	-0.34	6.80	20.90	6.18	13.57
Nota Ck	Tulika	—	SSA	-22.00	-29.89	-25.91	-18.57	-27.21	-22.93	-12.94	-24.28	-18.67	1.12	-11.08	-5.01	11.97	0.12	6.05	21.15	9.05	15.12
Ochre R	Wrigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
Oscar Ck	Norman Wells A	—	SSA	-22.51	-30.35	-26.45	-18.69	-27.89	-23.32	-13.44	-24.93	-19.21	1.11	-11.33	-5.13	12.11	0.69	6.41	21.10	9.44	15.34
Peekaya Ck	Wrigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
Petitot R	Petitot/Bistcho Lk	—	Alta	-10.75	-26.15	-14.95	-6.25	-25.30	-11.35	0.80	-17.90	-8.60	6.40	-9.37	-1.50	13.98	2.85	8.26	17.93	6.43	12.19

¹ January temperature data was unavailable and has been extrapolated from the nearest similar station.

Table 9. continued.

Site Name	Best Station	Next Best Station	Region	January			February			March			April			May			June		
				Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)
Poplar R	Lindburg	—	DEC	-18.33	-28.08	-23.23	-12.44	-25.29	-18.88	-5.19	-20.39	-12.80	8.08	-7.27	0.43	14.78	0.57	7.67	21.95	7.31	14.65
Prohibition Ck	Nonnan Wells A	—	SSA	-22.51	-30.35	-26.45	-18.89	-27.99	-23.32	-13.44	-24.93	-19.21	1.11	-11.33	-5.13	12.11	0.89	6.41	21.19	9.44	15.34
Rabbit Skin R	Ft Simpson A	—	DEC	-20.18	-28.85	-24.54	-14.49	-25.01	-19.77	-7.04	-19.78	-13.43	8.47	-6.44	0.03	15.20	2.31	8.78	22.19	9.16	15.69
River Bhr 2 Mins	Whigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
RPR-001	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
RPR-005	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
RPR-008	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
RPR-011	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
RPR-012	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
RPR-046	Trail Valley	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
RPR-048	Trail Valley	—	ISR	-21.18	-27.99	-24.60	-20.76	-28.61	-24.72	-19.59	-28.50	-24.09	-8.23	-18.46	-13.38	1.13	-7.43	-3.16	15.24	3.46	9.37
RPR-059	Inuvik A	—	ISR	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
RPR-065	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
RPR-069	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
RPR-070	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
RPR-075 (2005)	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
RPR-075 (2007)	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
RPR-099	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
RPR-117	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
RPR-271	Ft Good Hope A	—	SSA	-23.83	-32.14	-28.10	-19.86	-29.15	-24.56	-14.63	-26.02	-20.33	-0.34	-13.82	-7.10	10.71	-1.03	4.82	20.89	8.90	14.89
RPR-403	Whigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
RPR-481 ¹	Jean-Marie	Trout Lake	DEC	-15.51	-27.24	-21.41	-6.50	-23.60	-15.10	-0.95	-17.20	-9.10	7.40	-7.65	-0.15	13.70	0.90	7.35	21.00	7.70	14.35
Saline Ck	Tulita	—	SSA	-22.00	-29.69	-25.91	-18.57	-27.21	-22.93	-12.94	-24.28	-18.67	1.12	-11.06	-5.01	11.97	0.12	6.05	21.15	9.05	15.12
Sandy Ck	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
Smith Ck	Whigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
South Snafu Ck	Ft Good Hope A	—	SSA	-23.83	-32.14	-28.10	-19.86	-29.15	-24.56	-14.63	-26.02	-20.33	-0.34	-13.82	-7.10	10.71	-1.03	4.82	20.89	8.90	14.89
Stanley Ck	Trail Valley	—	ISR	-21.18	-27.99	-24.60	-20.76	-28.61	-24.72	-19.59	-28.50	-24.09	-8.23	-18.46	-13.38	1.13	-7.43	-3.16	15.24	3.46	9.37
Steep Ck	Tulita	—	SSA	-22.00	-29.69	-25.91	-18.57	-27.21	-22.93	-12.94	-24.28	-18.67	1.12	-11.06	-5.01	11.97	0.12	6.05	21.15	9.05	15.12
Thinantea Ck	Petitot/Bistcho Li	—	Alta	-10.75	-26.15	-14.95	-8.25	-25.30	-11.35	0.80	-17.90	-8.60	6.40	-9.37	-1.50	13.98	2.85	8.26	17.93	6.43	12.19
Thunder R	Little Chicago	—	GSA	-23.88	-31.48	-27.70	-20.10	-29.50	-24.83	-15.40	-27.80	-21.64	-0.85	-14.81	-7.84	10.64	-0.20	5.22	20.12	8.36	14.28
Tieda R	Ft Good Hope A	—	SSA	-23.83	-32.14	-28.10	-19.86	-29.15	-24.56	-14.63	-26.02	-20.33	-0.34	-13.82	-7.10	10.71	-1.03	4.82	20.89	8.90	14.89
Travailant R (2005)	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
Travailant R (2006)	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
Trout R ¹	Jean-Marie	Trout Lake	DEC	-15.51	-27.24	-21.41	-6.50	-23.60	-15.10	-0.95	-17.20	-9.10	7.40	-7.65	-0.15	13.70	0.90	7.35	21.00	7.70	14.35
Trout Rd Xing 1 ¹	Jean-Marie	Trout Lake	DEC	-15.51	-27.24	-21.41	-6.50	-23.60	-15.10	-0.95	-17.20	-9.10	7.40	-7.65	-0.15	13.70	0.90	7.35	21.00	7.70	14.35
Trout Rd Xing 2 ¹	Jean-Marie	Trout Lake	DEC	-15.51	-27.24	-21.41	-6.50	-23.60	-15.10	-0.95	-17.20	-9.10	7.40	-7.65	-0.15	13.70	0.90	7.35	21.00	7.70	14.35
Trout Rd Xing 3	Trout Lake	—	DEC	-15.51	-27.24	-21.41	-6.50	-23.60	-15.10	-0.95	-17.20	-9.10	7.40	-7.65	-0.15	13.70	0.90	7.35	21.00	7.70	14.35
Unnamed 10	Little Chicago	—	ISR	-23.88	-31.48	-27.70	-20.10	-29.50	-24.83	-15.40	-27.80	-21.64	-0.85	-14.81	-7.84	10.64	-0.20	5.22	20.12	8.36	14.28
Unnamed 01	Storm Hills	—	DEC	-20.48	-28.05	-23.30	-20.60	-26.99	-23.80	-20.34	-26.68	-23.58	-11.82	-18.20	-15.07	-3.98	-9.80	-6.93	13.97	4.00	9.11
Unnamed 02	Trail Valley	—	ISR	-21.18	-27.99	-24.60	-20.76	-28.61	-24.72	-19.59	-28.50	-24.09	-8.23	-18.46	-13.38	1.13	-7.43	-3.16	15.24	3.46	9.37
Unnamed 03	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
Unnamed 16	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
Unnamed 41	Whigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
Unnamed 4A	Ft Simpson A	—	DEC	-20.18	-28.85	-24.54	-14.49	-25.01	-19.77	-7.04	-19.78	-13.43	8.47	-6.44	0.03	15.20	2.31	8.78	22.19	9.16	15.69
Unnamed 4B	Ft Simpson A	—	DEC	-20.18	-28.85	-24.54	-14.49	-25.01	-19.77	-7.04	-19.78	-13.43	8.47	-6.44	0.03	15.20	2.31	8.78	22.19	9.16	15.69
Vermilion Ck	Tulita	—	SSA	-22.00	-29.69	-25.91	-18.57	-27.21	-22.93	-12.94	-24.28	-18.67	1.12	-11.06	-5.01	11.97	0.12	6.05	21.15	9.05	15.12
White Sand Ck	Whigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
Willowlake R	Whigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
Wood Bridge Ck	Inuvik A	—	GSA	-22.27	-29.85	-26.10	-20.09	-28.75	-24.43	-18.19	-28.30	-23.27	-5.01	-15.82	-10.43	5.25	-4.17	0.52	17.98	5.75	11.85
Whigley R	Whigley	—	DEC	-21.55	-30.67	-25.91	-16.41	-26.80	-21.38	-9.25	-22.31	-15.75	4.14	-10.09	-3.35	14.89	1.03	7.90	22.04	8.13	15.17
Yaya R	Tuktoyaktuk A	—	ISR	-22.25	-29.29	-25.78	-23.04	-30.89	-26.98	-22.73	-30.43	-26.60	-11.25	-20.09	-15.71	-1.45	-8.15	-4.81	11.05	1.61	6.38
Zed Ck	Storm Hills	—	ISR	-20.48	-28.05	-23.30	-20.60	-26.99	-23.80	-20.34	-26.68	-23.58	-11.82	-18.20	-15.07	-3.98	-9.80	-6.93	13.97	4.00	9.11

¹ January temperature data was unavailable and has been extrapolated from the nearest similar station.

Table 9, continued.

Site Name	Best Station	July			August			September			October			November			December		
		Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)
Aldak Ch	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.36	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.64	-18.30	-19.31	-28.30	-22.83
Big Lake Ck	Little Chicago	21.64	10.43	16.07	17.89	7.53	12.74	10.20	1.89	5.94	-3.09	-9.36	-6.25	-15.58	-23.00	-19.31	-20.80	-28.28	-25.07
Big Smith Ck	Tulita	22.68	11.45	17.02	19.03	8.60	13.90	11.35	2.82	6.94	-0.71	-6.30	-3.57	-13.77	-20.38	-17.19	-18.86	-25.96	-22.35
Billy Ck	Norman Wells A	22.66	11.64	17.16	18.98	8.54	13.77	11.43	2.51	6.99	-1.21	-7.26	-4.25	-13.86	-20.83	-17.37	-18.99	-26.04	-22.82
Borrow 20.17	Storm Hills	15.96	7.07	11.81	11.32	4.42	7.88	5.07	-0.11	2.43	-3.93	-7.83	-5.90	-13.86	-20.83	-17.37	-18.99	-26.04	-22.82
Bosworth Ck	Norman Wells A	22.66	11.64	17.16	18.98	8.54	13.77	11.43	2.51	6.99	-1.21	-7.26	-4.25	-13.86	-20.83	-17.37	-18.99	-26.04	-22.82
Brackett R	Tulita	22.68	11.45	17.02	19.03	8.60	13.90	11.35	2.82	6.94	-0.71	-6.30	-3.57	-13.77	-20.38	-17.19	-18.86	-25.96	-22.35
Campbell Ck	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
Campbell R	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
Canyon Ck	Norman Wells A	22.66	11.64	17.16	18.98	8.54	13.77	11.43	2.51	6.99	-1.21	-7.26	-4.25	-13.86	-20.83	-17.37	-18.99	-26.04	-22.82
Chick Ck	Fl Good Hope A	22.41	10.76	16.59	18.68	7.40	13.01	10.67	1.13	5.89	-1.73	-8.68	-5.22	-15.58	-23.22	-19.43	-20.14	-28.48	-24.33
Cli Ck	Little Doctor Lk	22.28	8.52	15.42	19.66	5.84	12.78	13.90	1.12	7.53	2.67	-7.38	-2.37	-8.68	-19.75	-14.25	-20.19	-30.35	-25.28
Dahadinn R	Wrigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
Dam Ck	Wrigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
Dehthah Deho R	Trout Lake	21.37	8.74	15.08	18.71	5.54	12.18	12.57	0.89	6.74	4.50	-5.25	-0.40	-8.84	-17.84	-12.24	-11.25	-22.99	-17.14
Dodo Ck	Norman Wells A	22.66	11.64	17.16	18.98	8.54	13.77	11.43	2.51	6.99	-1.21	-7.26	-4.25	-13.86	-20.83	-17.37	-18.99	-26.04	-22.82
Donnelly R	Fl Good Hope A	22.41	10.76	16.59	18.68	7.40	13.01	10.67	1.13	5.89	-1.73	-8.68	-5.22	-15.58	-23.22	-19.43	-20.14	-28.48	-24.33
Douglas Ck	Trail Valley	16.30	6.09	11.21	14.31	4.89	9.62	7.79	0.34	4.10	-3.47	-9.30	-6.39	-14.89	-21.54	-18.24	-18.99	-25.51	-22.30
East Ch	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.36	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.64	-18.30	-19.31	-28.30	-22.83
Elliott Ck	Norman Wells A	22.66	11.64	17.16	18.98	8.54	13.77	11.43	2.51	6.99	-1.21	-7.26	-4.25	-13.86	-20.83	-17.37	-18.99	-26.04	-22.82
Fish Trap Ck	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
Francis Ck	Norman Wells A	22.66	11.64	17.16	18.98	8.54	13.77	11.43	2.51	6.99	-1.21	-7.26	-4.25	-13.86	-20.83	-17.37	-18.99	-26.04	-22.82
Gossage Ck	Little Chicago	21.64	10.43	16.07	17.89	7.53	12.74	10.20	1.89	5.94	-3.09	-9.36	-6.25	-15.58	-23.00	-19.31	-20.80	-28.28	-25.07
Hanna R	Fl Good Hope A	22.41	10.76	16.59	18.68	7.40	13.01	10.67	1.13	5.89	-1.73	-8.68	-5.22	-15.58	-23.22	-19.43	-20.14	-28.48	-24.33
Hans Ck	Trail Valley	16.30	6.09	11.21	14.31	4.89	9.62	7.79	0.34	4.10	-3.47	-9.30	-6.39	-14.89	-21.54	-18.24	-18.99	-25.51	-22.30
Harris R	Fl Simpson A	23.87	11.72	17.81	20.85	8.79	14.86	14.04	3.07	8.57	2.25	-5.34	-1.55	-10.39	-18.16	-14.33	-16.70	-25.00	-20.89
Harry Ch	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.36	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.64	-18.30	-19.31	-28.30	-22.83
Heleva Ck	Norman Wells A	22.66	11.64	17.16	18.98	8.54	13.77	11.43	2.51	6.99	-1.21	-7.26	-4.25	-13.86	-20.83	-17.37	-18.99	-26.04	-22.82
Hodgson Ck	Wrigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
Holmes Ck	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.36	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.64	-18.30	-19.31	-28.30	-22.83
Husky Ck	Storm Hills	15.96	7.07	11.81	11.32	4.42	7.88	5.07	-0.11	2.43	-3.93	-7.83	-5.90	-13.86	-20.83	-17.37	-18.99	-26.04	-22.82
Jackfish Ck	Fl Good Hope A	22.41	10.76	16.59	18.68	7.40	13.01	10.67	1.13	5.89	-1.73	-8.68	-5.22	-15.58	-23.22	-19.43	-20.14	-28.48	-24.33
Jean-Marie R1	Jean-Marie	23.00	9.35	16.20	20.15	7.10	13.65	16.10	2.60	9.40	2.40	-5.90	-1.80	-9.50	-17.10	-13.30	-15.40	-25.70	-20.60
Jean-Marie R2	Jean-Marie	23.00	9.35	16.20	20.15	7.10	13.65	16.10	2.60	9.40	2.40	-5.90	-1.80	-9.50	-17.10	-13.30	-15.40	-25.70	-20.60
Johnson R	Wrigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
Jungle Ridge Ck	Tuktoyaktuk A	22.68	11.45	17.02	19.03	8.60	13.90	11.35	2.82	6.94	-0.71	-6.30	-3.57	-13.77	-20.38	-17.19	-18.86	-25.96	-22.35
Kulusupak Ch	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.36	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.64	-18.30	-19.31	-28.30	-22.83
Kumak Ch	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.36	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.64	-18.30	-19.31	-28.30	-22.83
Little Smith Ck	Tulita	22.68	11.45	17.02	19.03	8.60	13.90	11.35	2.82	6.94	-0.71	-6.30	-3.57	-13.77	-20.38	-17.19	-18.86	-25.96	-22.35
Loon R	Fl Good Hope A	22.41	10.76	16.59	18.68	7.40	13.01	10.67	1.13	5.89	-1.73	-8.68	-5.22	-15.58	-23.22	-19.43	-20.14	-28.48	-24.33
Mackenzie R	Fl Simpson A	23.87	11.72	17.81	20.85	8.79	14.86	14.04	3.07	8.57	2.25	-5.34	-1.55	-10.39	-18.16	-14.33	-16.70	-25.00	-20.89
Martin R	Fl Simpson A	23.87	11.72	17.81	20.85	8.79	14.86	14.04	3.07	8.57	2.25	-5.34	-1.55	-10.39	-18.16	-14.33	-16.70	-25.00	-20.89
Nadia Ck	Fl Simpson A	23.87	11.72	17.81	20.85	8.79	14.86	14.04	3.07	8.57	2.25	-5.34	-1.55	-10.39	-18.16	-14.33	-16.70	-25.00	-20.89
Noell Ck	Trail Valley	16.30	6.09	11.21	14.31	4.89	9.62	7.79	0.34	4.10	-3.47	-9.30	-6.39	-14.89	-21.54	-18.24	-18.99	-25.51	-22.30
North Nahanni R	Little Doctor Lk	22.28	8.52	15.42	19.66	5.84	12.78	13.90	1.12	7.53	2.67	-7.38	-2.37	-8.68	-19.75	-14.25	-20.19	-30.35	-25.28
Nota Ck	Tulita	22.68	11.45	17.02	19.03	8.60	13.90	11.35	2.82	6.94	-0.71	-6.30	-3.57	-13.77	-20.38	-17.19	-18.86	-25.96	-22.35
Ochre R	Wrigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
Oscar Ck	Norman Wells A	22.66	11.64	17.16	18.98	8.54	13.77	11.43	2.51	6.99	-1.21	-7.26	-4.25	-13.86	-20.83	-17.37	-18.99	-26.04	-22.82
Peekaya Ck	Wrigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
Pettit R	Pettit/Bischo Lk	20.00	8.99	14.53	18.52	7.26	12.93	12.87	-0.27	6.30	3.30	-7.35	-2.05	-6.00	-16.00	-11.03	-12.25	-27.10	-19.70

¹ January temperature data was unavailable and has been extrapolated from the nearest similar station.

Table 9. continued.

Site Name	Beet Station	July			August			September			October			November			December		
		Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)	Max (°C)	Min (°C)	Mean (°C)
Poplar R	Lindburg	23.57	10.09	16.85	20.67	6.98	13.84	13.75	1.84	7.72	3.77	-5.10	-0.68	-10.12	-18.17	-14.16	-15.38	-24.77	-20.08
Prohibition Ck	Norman Wells A	22.86	11.64	17.18	18.98	8.54	13.77	11.43	2.51	6.99	-1.21	-7.28	-4.25	-13.88	-20.83	-17.37	-18.99	-28.64	-22.82
Rabbit Skin R	Pt Simpson A	23.87	11.72	17.81	20.85	8.79	14.86	14.04	3.07	8.57	2.25	-5.34	-1.55	-10.39	-18.16	-14.33	-16.70	-25.00	-20.89
River Btr 2 Mns	Wigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
RPR-001	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.38	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.84	-18.30	-19.31	-26.30	-22.83
RPR-005	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.38	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.84	-18.30	-19.31	-26.30	-22.83
RPR-008	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.38	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.84	-18.30	-19.31	-26.30	-22.83
RPR-011	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.38	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.84	-18.30	-19.31	-26.30	-22.83
RPR-012	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.38	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.84	-18.30	-19.31	-26.30	-22.83
RPR-046	Trail Valley	16.30	6.09	11.21	14.31	4.89	9.62	7.79	0.34	4.10	-3.47	-9.30	-6.39	-14.89	-21.84	-18.30	-19.31	-26.30	-22.83
RPR-048	Trail Valley	16.30	6.09	11.21	14.31	4.89	9.62	7.79	0.34	4.10	-3.47	-9.30	-6.39	-14.89	-21.84	-18.30	-19.31	-26.30	-22.83
RPR-059	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
RPR-065	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
RPR-069	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
RPR-070	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
RPR-075 (2005)	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
RPR-075 (2007)	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
RPR-089	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
RPR-117	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
RPR-271	Pt Good Hope A	22.41	10.76	16.59	18.68	7.40	13.01	10.67	1.13	5.89	-1.73	-8.68	-5.22	-15.56	-23.22	-19.43	-20.14	-28.48	-24.33
RPR-403	Wigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
RPR-481	Jean-Marie	23.00	9.35	16.20	20.15	6.40	13.85	18.10	2.60	9.40	2.40	-5.90	-1.80	-9.50	-17.10	-13.30	-15.40	-25.70	-20.60
Saline Ck	Tufts	22.86	11.45	17.02	19.03	8.60	13.90	11.35	2.62	6.94	-0.71	-6.30	-3.57	-13.77	-20.38	-17.19	-18.86	-25.96	-22.35
Sandy Ck	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
Smith Ck	Wigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
South Snash Ck	Pt Good Hope A	22.41	10.76	16.59	18.68	7.40	13.01	10.67	1.13	5.89	-1.73	-8.68	-5.22	-15.56	-23.22	-19.43	-20.14	-28.48	-24.33
Stanley Ck	Trail Valley	16.30	6.09	11.21	14.31	4.89	9.62	7.79	0.34	4.10	-3.47	-9.30	-6.39	-14.89	-21.84	-18.30	-19.31	-26.30	-22.83
Sleep Ck	Tufts	22.86	11.45	17.02	19.03	8.60	13.90	11.35	2.62	6.94	-0.71	-6.30	-3.57	-13.77	-20.38	-17.19	-18.86	-25.96	-22.35
Thalassia Ck	Pettit/Bischof Lt	20.00	8.99	14.53	18.52	7.26	12.93	12.87	-0.27	6.30	3.30	-7.35	-2.05	-8.00	-16.00	-11.03	-12.25	-27.10	-19.70
Thunder R	Little Chicago	21.84	10.43	16.07	17.89	7.53	12.74	10.20	1.99	5.94	-3.09	-9.36	-6.25	-15.56	-23.00	-19.31	-20.80	-28.28	-25.07
Tieda R	Pt Good Hope A	22.41	10.76	16.59	18.68	7.40	13.01	10.67	1.13	5.89	-1.73	-8.68	-5.22	-15.56	-23.22	-19.43	-20.14	-28.48	-24.33
Travallant R (2005)	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
Travallant R (2006)	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
Trout R	Jean-Marie	23.00	9.35	16.20	20.15	7.10	13.85	18.10	2.60	9.40	2.40	-5.90	-1.80	-9.50	-17.10	-13.30	-15.40	-25.70	-20.60
Trout Rd Xing 1	Jean-Marie	23.00	9.35	16.20	20.15	7.10	13.85	18.10	2.60	9.40	2.40	-5.90	-1.80	-9.50	-17.10	-13.30	-15.40	-25.70	-20.60
Trout Rd Xing 2	Jean-Marie	23.00	9.35	16.20	20.15	7.10	13.85	18.10	2.60	9.40	2.40	-5.90	-1.80	-9.50	-17.10	-13.30	-15.40	-25.70	-20.60
Trout Rd Xing 3	Trout Lake	21.37	8.74	15.08	18.71	5.54	12.16	12.57	0.89	6.74	4.50	-5.25	-0.40	-8.84	-17.84	-12.24	-11.25	-22.99	-17.14
Unamed 10	Little Chicago	21.84	10.43	16.07	17.89	7.53	12.74	10.20	1.99	5.94	-3.09	-9.36	-6.25	-15.56	-23.00	-19.31	-20.80	-28.28	-25.07
Unamed 01	Storm Hills	15.96	7.07	11.81	11.32	4.42	7.88	5.07	-0.11	2.43	-3.93	-7.83	-5.90	-15.65	-20.90	-18.30	-19.34	-24.46	-21.82
Unamed 02	Trail Valley	16.30	6.09	11.21	14.31	4.89	9.62	7.79	0.34	4.10	-3.47	-9.30	-6.39	-14.89	-21.84	-18.30	-19.31	-26.30	-22.83
Unamed 03	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
Unamed 16	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
Unamed 41	Wigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
Unamed 4A	Pt Simpson A	23.87	11.72	17.81	20.85	8.79	14.86	14.04	3.07	8.57	2.25	-5.34	-1.55	-10.39	-18.16	-14.33	-16.70	-25.00	-20.89
Unamed 4B	Pt Simpson A	23.87	11.72	17.81	20.85	8.79	14.86	14.04	3.07	8.57	2.25	-5.34	-1.55	-10.39	-18.16	-14.33	-16.70	-25.00	-20.89
Vermilion Ck	Tufts	22.86	11.45	17.02	19.03	8.60	13.90	11.35	2.62	6.94	-0.71	-6.30	-3.57	-13.77	-20.38	-17.19	-18.86	-25.96	-22.35
White Sand Ck	Wigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
Wilowake R	Wigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
Wood Bridge Ck	Inuvik A	19.65	8.97	14.33	16.36	6.67	11.53	8.37	0.81	4.60	-3.41	-9.41	-6.43	-14.59	-21.82	-18.23	-19.03	-26.25	-22.65
Wigley R	Wigley	23.76	10.79	17.24	19.88	7.20	13.49	12.28	1.94	7.03	0.41	-6.15	-2.97	-12.99	-20.15	-16.89	-18.21	-26.05	-22.30
Yaya R	Tuktoyaktuk A	14.86	6.68	10.80	12.18	5.09	8.66	6.38	1.23	3.82	-3.90	-8.93	-6.44	-14.93	-21.84	-18.30	-19.31	-26.30	-22.83
Zed Ck	Storm Hills	15.96	7.07	11.81	11.32	4.42	7.88	5.07	-0.11	2.43	-3.93	-7.83	-5.90	-15.65	-20.90	-18.30	-19.34	-24.46	-21.82

¹ January temperature data was unavailable and has been extrapolated from the nearest similar station.

Table 10. Average precipitation (snow and rain, mm) over 15 years at weather stations in the vicinity each of the 102 streams sampled in the Mackenzie River Valley following the Reference Condition Approach (2005-2007).

SiteName	Best Station	Next Best Station	Region	January (mm)	February (mm)	March (mm)	April (mm)	May (mm)	June (mm)	July (mm)	August (mm)	September (mm)	October (mm)	November (mm)	December (mm)
Aldak Ch	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.88	9.93	9.85
Big Lake Ck ¹	Little Chicago	Fl Good Hope A	GSA	15.30	18.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.38	25.05	23.18
Big Smith Ck	Tulita	—	SSA	13.04	9.86	8.31	6.90	14.59	36.34	46.25	52.23	30.48	27.55	19.65	12.58
Billy Ck	Norman Wells A	—	SSA	12.73	15.96	13.47	8.54	17.00	35.27	40.39	46.86	30.56	23.91	16.88	16.53
Bonow 20.17 ¹	Storm Hills	Trail Valley	ISR	14.60	12.60	10.85	5.10	13.90	11.12	14.70	16.83	13.93	15.35	10.85	11.45
Bozworth Ck	Norman Wells A	—	SSA	12.73	15.96	13.47	8.54	17.00	35.27	40.39	46.86	30.56	23.91	16.88	16.53
Brackett R	Tulita	—	SSA	13.04	9.86	8.31	6.90	14.59	36.34	46.25	52.23	30.48	27.55	19.65	12.58
Campbell Ck	Inuvik A	—	GSA	11.88	11.15	13.79	7.82	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
Campbell R	Inuvik A	—	GSA	11.88	11.15	13.79	7.82	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
Canyon Ck	Norman Wells A	—	SSA	12.73	15.96	13.47	8.54	17.00	35.27	40.39	46.86	30.56	23.91	16.88	16.53
Chick Ck	Fl Good Hope A	—	SSA	15.30	18.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.38	25.05	23.18
Ch Ck	Little Doctor Lk	—	DEC	23.54	18.81	34.19	22.87	40.84	64.33	90.18	66.92	28.35	47.49	32.73	23.64
Dahadinni R	Wrigley	—	DEC	13.71	12.33	13.22	6.96	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
Dam Ck	Wrigley	—	DEC	13.71	12.33	13.22	6.96	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
Dehthithi Dehe R ¹	Trail Lake	Bischof/Fl Lland	DEC	31.89	20.37	17.74	16.29	22.27	68.63	95.45	49.28	20.60	30.17	32.58	25.93
Dodo Ck	Norman Wells A	—	SSA	12.73	15.96	13.47	8.54	17.00	35.27	40.39	46.86	30.56	23.91	16.88	16.53
Donnelly R	Fl Good Hope A	—	GSA	15.30	18.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.38	25.05	23.18
Douglas Ck ²	Trail Valley	Tuktoyaktuk A	GSA	14.60	12.60	10.85	5.10	13.90	11.12	14.70	16.83	13.93	15.35	10.85	11.45
East Ch	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.88	9.93	9.85
Elliot Ck	Norman Wells A	—	SSA	12.73	15.96	13.47	8.54	17.00	35.27	40.39	46.86	30.56	23.91	16.88	16.53
Fish Trap Ck	Inuvik A	—	GSA	11.88	11.15	13.79	7.82	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
Francis Ck	Norman Wells A	—	SSA	12.73	15.96	13.47	8.54	17.00	35.27	40.39	46.86	30.56	23.91	16.88	16.53
Gossage Ck ¹	Little Chicago	Fl Good Hope A	GSA	15.30	18.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.38	25.05	23.18
Hanna R	Fl Good Hope A	—	SSA	15.30	18.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.38	25.05	23.18
Hans Ck ²	Trail Valley	Tuktoyaktuk A	ISR	14.60	12.60	10.85	5.10	13.90	11.12	14.70	16.83	13.93	15.35	10.85	11.45
Harris R	Fl Simpson A	—	DEC	18.81	14.57	16.45	16.84	33.96	45.28	63.89	63.83	30.11	32.23	22.39	20.96
Harry Ch	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.88	9.93	9.85
Helewa Ck	Norman Wells A	—	SSA	12.73	15.96	13.47	8.54	17.00	35.27	40.39	46.86	30.56	23.91	16.88	16.53
Hodgson Ck	Wrigley	—	DEC	13.71	12.33	13.22	6.96	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
Holmes Ck	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.88	9.93	9.85
Husky Ck ¹	Storm Hills	Trail Valley	ISR	14.60	12.60	10.85	5.10	13.90	11.12	14.70	16.83	13.93	15.35	10.85	11.45
Jackfish Ck	Fl Good Hope A	—	SSA	15.30	18.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.38	25.05	23.18
Jean-Marie R1 ¹	Jean-Marie	Fl Simpson A	DEC	10.01	14.57	16.45	16.84	33.96	45.28	63.89	63.83	30.11	32.23	22.39	20.96
Jean-Marie R2 ¹	Jean-Marie	Fl Simpson A	DEC	10.01	14.57	16.45	16.84	33.96	45.28	63.89	63.83	30.11	32.23	22.39	20.96
Johnson R	Wrigley	—	DEC	13.71	12.33	13.22	6.96	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
Jungle Ridge Ck	Tulita	—	SSA	13.04	9.86	8.31	6.90	14.59	36.34	46.25	52.23	30.48	27.55	19.65	12.58
Kukuarpak Ch	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.88	9.93	9.85
Kumak Ch	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.88	9.93	9.85
Little Smith Ck	Tulita	—	SSA	13.04	9.86	8.31	6.90	14.59	36.34	46.25	52.23	30.48	27.55	19.65	12.58
Loon R	Fl Good Hope A	—	SSA	15.30	18.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.38	25.05	23.18
Mackenzie R	Fl Simpson A	—	DEC	18.81	14.57	16.45	16.84	33.96	45.28	63.89	63.83	30.11	32.23	22.39	20.96
Martin R	Fl Simpson A	—	DEC	18.81	14.57	16.45	16.84	33.96	45.28	63.89	63.83	30.11	32.23	22.39	20.96
Nadie Ck	Fl Simpson A	—	DEC	18.81	14.57	16.45	16.84	33.96	45.28	63.89	63.83	30.11	32.23	22.39	20.96
Noel Ck ²	Trail Valley	Tuktoyaktuk A	ISR	14.60	12.60	10.85	5.10	13.90	11.12	14.70	16.83	13.93	15.35	10.85	11.45
North Nahanni R	Little Doctor Lk	—	DEC	23.54	18.81	34.19	22.87	40.84	64.33	90.18	66.92	28.35	47.49	32.73	23.64
Nota Ck	Tulita	—	SSA	13.04	9.86	8.31	6.90	14.59	36.34	46.25	52.23	30.48	27.55	19.65	12.58

¹ Data for all months taken from 'Next Best Station' because nearest similar station data unavailable.

² June and August precipitation data calculated as 0.75 x Tuktoyaktuk Stn values.

³ January-October through April data extrapolated from Fl Lland Station.

⁴ Data for all months calculated as the mean from Fl Simpson, Lindburg and Fl Lland stations (approximate match in elevation/terrain/slope).

Table 10. continued.

SiteName	Best Station	Next Best Station	Region	January (mm)	February (mm)	March (mm)	April (mm)	May (mm)	June (mm)	July (mm)	August (mm)	September (mm)	October (mm)	November (mm)	December (mm)
Ochre R	Wrigley	—	DEC	13.71	12.33	13.22	6.98	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
Oscar Ck	Norman Wells A	—	SSA	12.73	15.96	13.47	8.54	17.00	35.27	40.39	46.86	30.56	23.91	16.98	16.53
Peekaya Ck	Wrigley	—	DEC	13.71	12.33	13.22	6.98	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
Peikot R ¹	Pettit/Bistcho Lk	Fl Liant	Alta	31.89	20.37	17.74	16.29	22.27	69.93	95.45	46.28	20.60	30.17	32.58	25.93
Poplar R	Lindburg	—	DEC	23.91	16.24	16.26	22.58	40.40	66.73	81.87	62.30	47.08	30.57	29.67	21.55
Prohibition Ck	Norman Wells A	—	SSA	12.73	15.96	13.47	8.54	17.00	35.27	40.39	46.86	30.56	23.91	16.98	16.53
Rabbit Skin R	Fl Simpson A	—	DEC	16.01	14.57	16.45	16.84	33.96	45.28	63.89	63.83	30.11	32.23	22.39	20.98
River Stw 2 Mins	Wrigley	—	DEC	13.71	12.33	13.22	6.98	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
RPR-001	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.89	9.93	9.85
RPR-005	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.89	9.93	9.85
RPR-008	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.89	9.93	9.85
RPR-011	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.89	9.93	9.85
RPR-012	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.89	9.93	9.85
RPR-046 ²	Trail Valley	Tuktoyaktuk A	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.89	9.93	9.85
RPR-048 ²	Trail Valley	Tuktoyaktuk A	ISR	14.60	12.60	10.85	5.10	13.90	11.12	14.70	16.63	13.93	15.35	10.85	11.45
RPR-059	Inuvik A	—	ISR	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
RPR-065	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
RPR-069	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
RPR-070	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
RPR-075 (2005)	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
RPR-075 (2007)	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
RPR-099	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
RPR-117	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
RPR-271	Fl Good Hope A	—	SSA	15.30	16.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.36	25.05	23.18
RPR-403	Wrigley	—	DEC	13.71	12.33	13.22	6.98	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
RPR-481 ¹	Jean-Marie	see footnote 4	DEC	23.94	17.08	17.48	18.57	36.44	58.91	78.84	57.11	41.64	30.99	28.21	22.82
Saline Ck	Tullis	—	SSA	13.04	9.86	8.31	6.90	14.59	36.34	46.25	52.23	30.48	27.55	19.65	12.58
Sandy Ck	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
Smith Ck	Wrigley	—	DEC	13.71	12.33	13.22	6.98	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
South Snafu Ck	Fl Good Hope A	—	SSA	15.30	16.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.36	25.05	23.18
Stanley Ck ²	Trail Valley	Tuktoyaktuk A	ISR	14.60	12.60	10.85	5.10	13.90	11.12	14.70	16.63	13.93	15.35	10.85	11.45
Steep Ck	Tullis	—	SSA	13.04	9.86	8.31	6.90	14.59	36.34	46.25	52.23	30.48	27.55	19.65	12.58
Thinshee Ck ³	Pettit/Bistcho Lk	Fl Liant	Alta	31.89	20.37	17.74	16.29	22.27	69.93	95.45	46.28	20.60	30.17	32.58	25.93
Thunder R ¹	Little Chicago	Fl Good Hope A	GSA	15.30	16.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.36	25.05	23.18
Tieda R	Fl Good Hope A	—	SSA	15.30	16.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.36	25.05	23.18
Travailant R (2006)	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
Travailant R (2006)	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
Trout R 2	Jean-Marie	see footnote 4	DEC	23.94	17.08	17.48	18.57	36.44	58.91	78.84	57.11	41.64	30.99	28.21	22.82
Trout Rd Xing 1 ¹	Jean-Marie	see footnote 4	DEC	23.94	17.08	17.48	18.57	36.44	58.91	78.84	57.11	41.64	30.99	28.21	22.82
Trout Rd Xing 2 ¹	Jean-Marie	see footnote 4	DEC	23.94	17.08	17.48	18.57	36.44	58.91	78.84	57.11	41.64	30.99	28.21	22.82
Trout Rd Xing 3 ¹	Tout Lake	see footnote 4	DEC	23.94	17.08	17.48	18.57	36.44	58.91	78.84	57.11	41.64	30.99	28.21	22.82
Unnamed 10 ¹	Little Chicago	Fl Good Hope A	ISR	15.30	16.77	17.42	7.47	12.39	30.21	36.02	40.16	35.83	30.36	25.05	23.18
Unnamed 01 ¹	Storm Hills	Trail Valley	DEC	14.60	12.60	10.85	5.10	13.90	11.12	14.70	16.63	13.93	15.35	10.85	11.45
Unnamed 02 ²	Trail Valley	Tuktoyaktuk A	ISR	14.60	12.60	10.85	5.10	13.90	11.12	14.70	16.63	13.93	15.35	10.85	11.45
Unnamed 03	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
Unnamed 16	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
Unnamed 41	Wrigley	—	DEC	13.71	12.33	13.22	6.98	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
Unnamed 4A	Fl Simpson A	—	DEC	16.01	14.57	16.45	16.84	33.96	45.28	63.89	63.83	30.11	32.23	22.39	20.98
Unnamed 4B	Fl Simpson A	—	DEC	16.01	14.57	16.45	16.84	33.96	45.28	63.89	63.83	30.11	32.23	22.39	20.98
Vermilion Ck	Tullis	—	SSA	13.04	9.86	8.31	6.90	14.59	36.34	46.25	52.23	30.48	27.55	19.65	12.58
White Sand Ck	Wrigley	—	DEC	13.71	12.33	13.22	6.98	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
Willowlake R	Wrigley	—	DEC	13.71	12.33	13.22	6.98	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
Wood Bridge Ck	Inuvik A	—	GSA	11.88	11.15	13.79	7.62	13.37	23.30	35.15	37.97	26.15	20.94	15.30	13.87
Wrigley R	Wrigley	—	DEC	13.71	12.33	13.22	6.98	21.56	25.80	64.33	39.99	35.54	25.78	17.43	19.12
Yaya R	Tuktoyaktuk A	—	ISR	8.90	5.73	7.89	7.24	4.96	14.83	20.90	22.18	17.73	15.89	9.93	9.85
Zed Ck ¹	Storm Hills	Trail Valley	ISR	14.60	12.60	10.85	5.10	13.90	11.12	14.70	16.63	13.93	15.35	10.85	11.45

¹ Data for all months taken from "Next Best Station" because nearest similar station data unavailable.² June and August precipitation data calculated as 0.75×Tuktoyaktuk Sin values.³ January October through April data extrapolated from Fl Liant Station.⁴ Data for all months calculated as the mean from Fl Simpson, Lindburg and Fl Liant stations (approximate match in elevation/terrain/latitude).

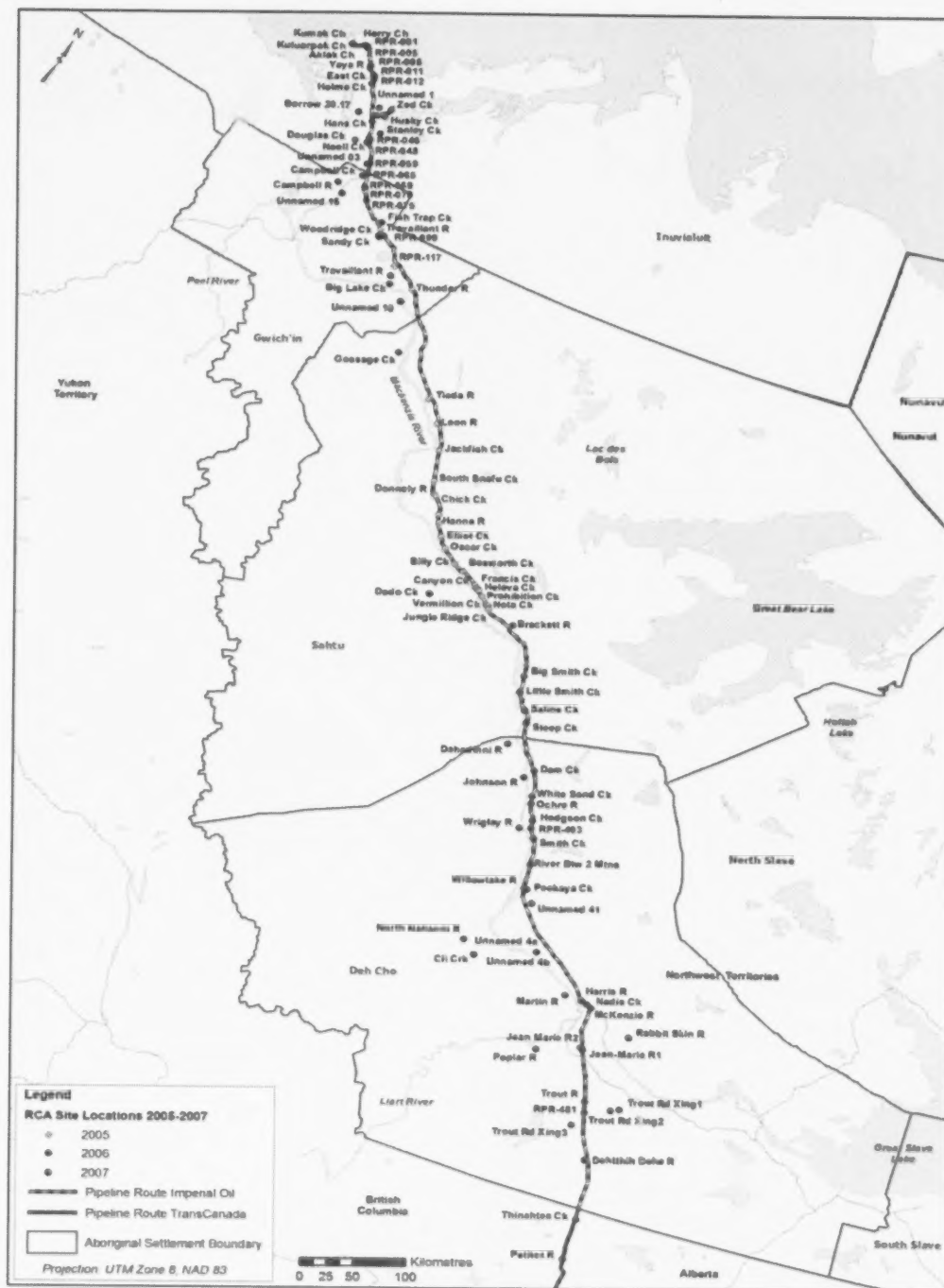


Figure 1. Overview map of the 102 streams sampled in the Mackenzie River Valley, 2005-2007. (Ch: Channel; R: River; Ck: Creek).

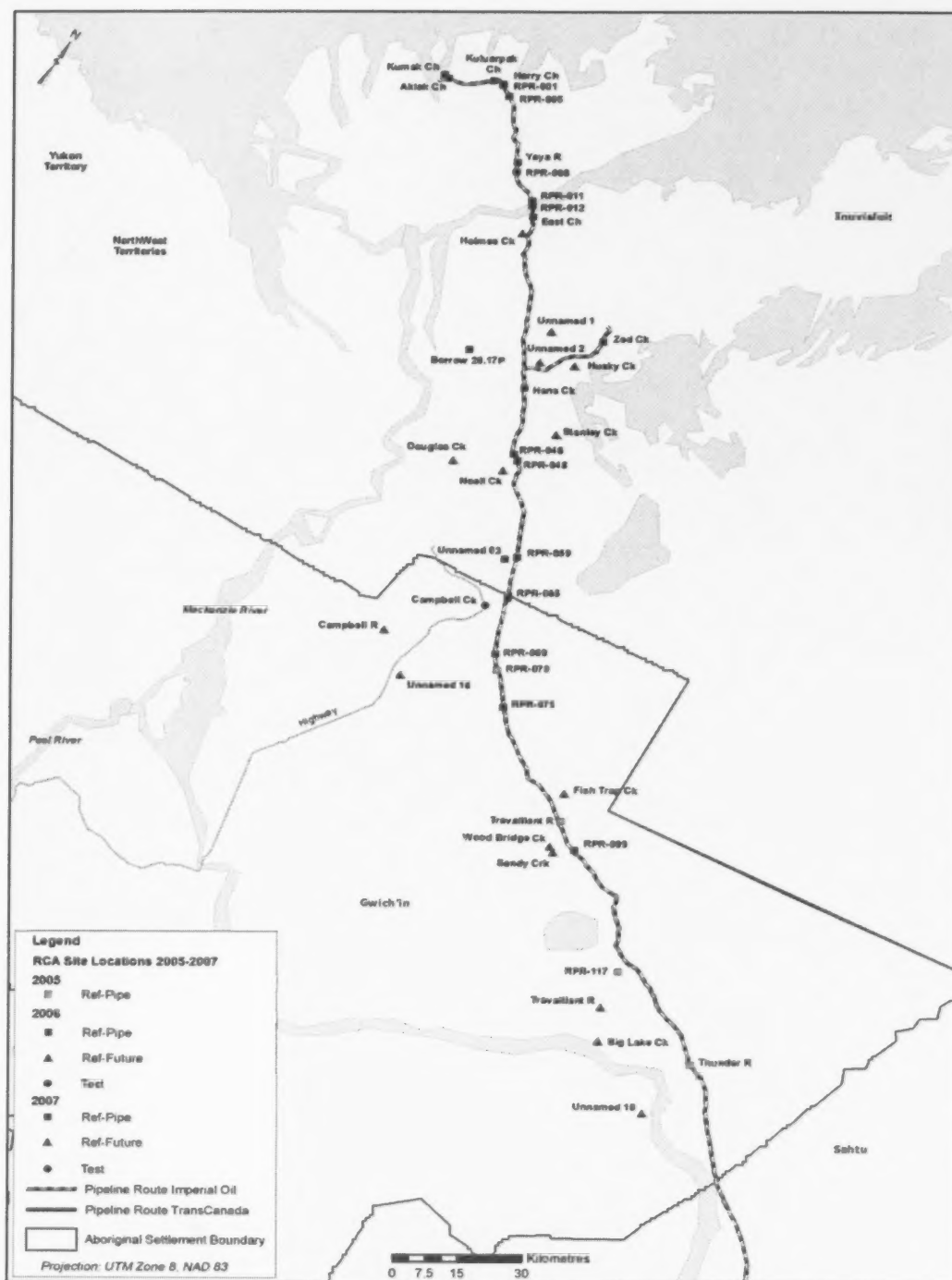


Figure 2. Streams sampled in the Inuvialuit Settlement Region and the Gwich'in Settlement Area, 2005-2007. (Ch: Channel; R: River; Ck: Creek).

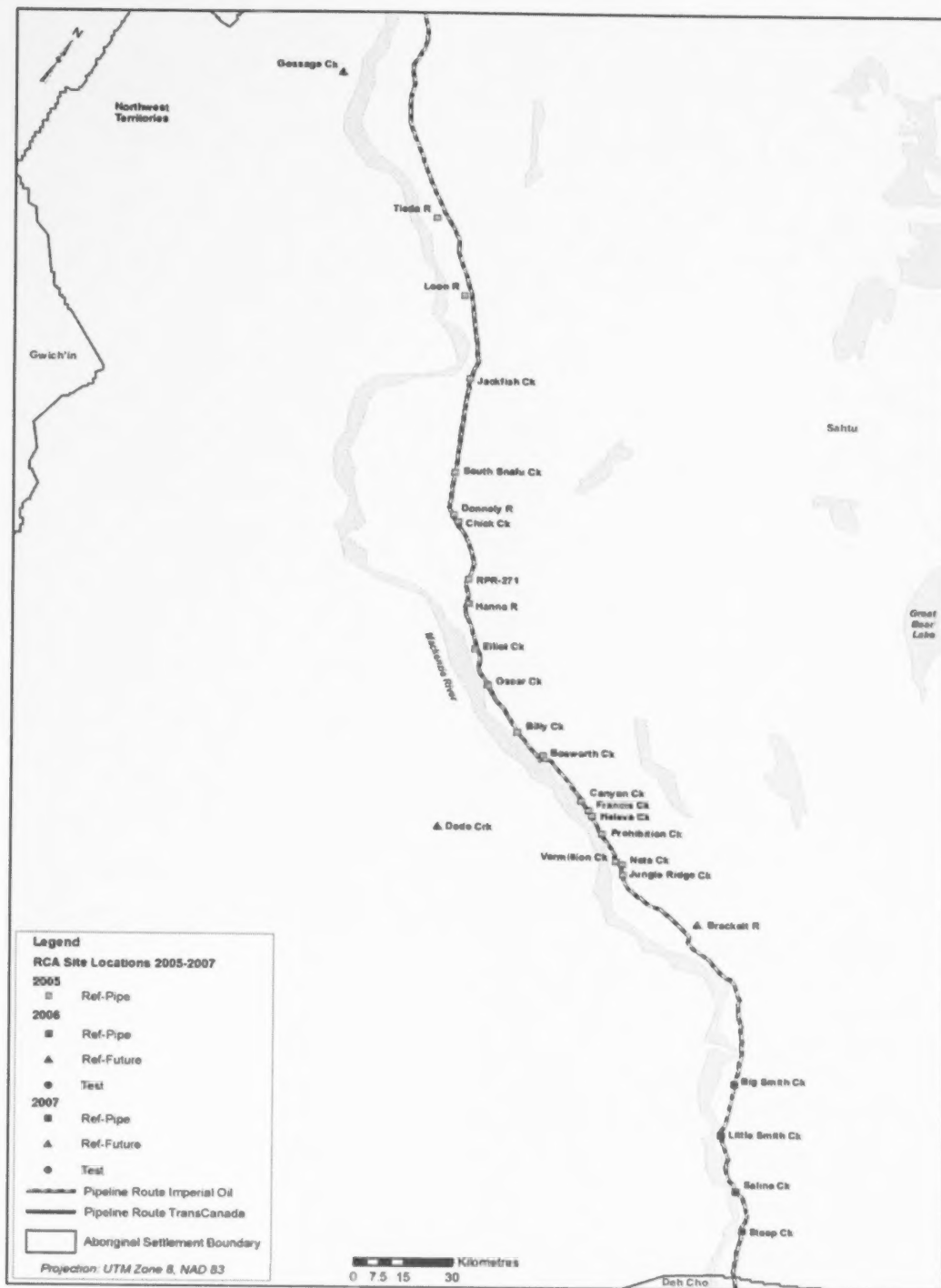


Figure 3. Streams sampled in the Sahtu Settlement Area, 2005-2007. (Ch: Channel; R: River; Ck: Creek).

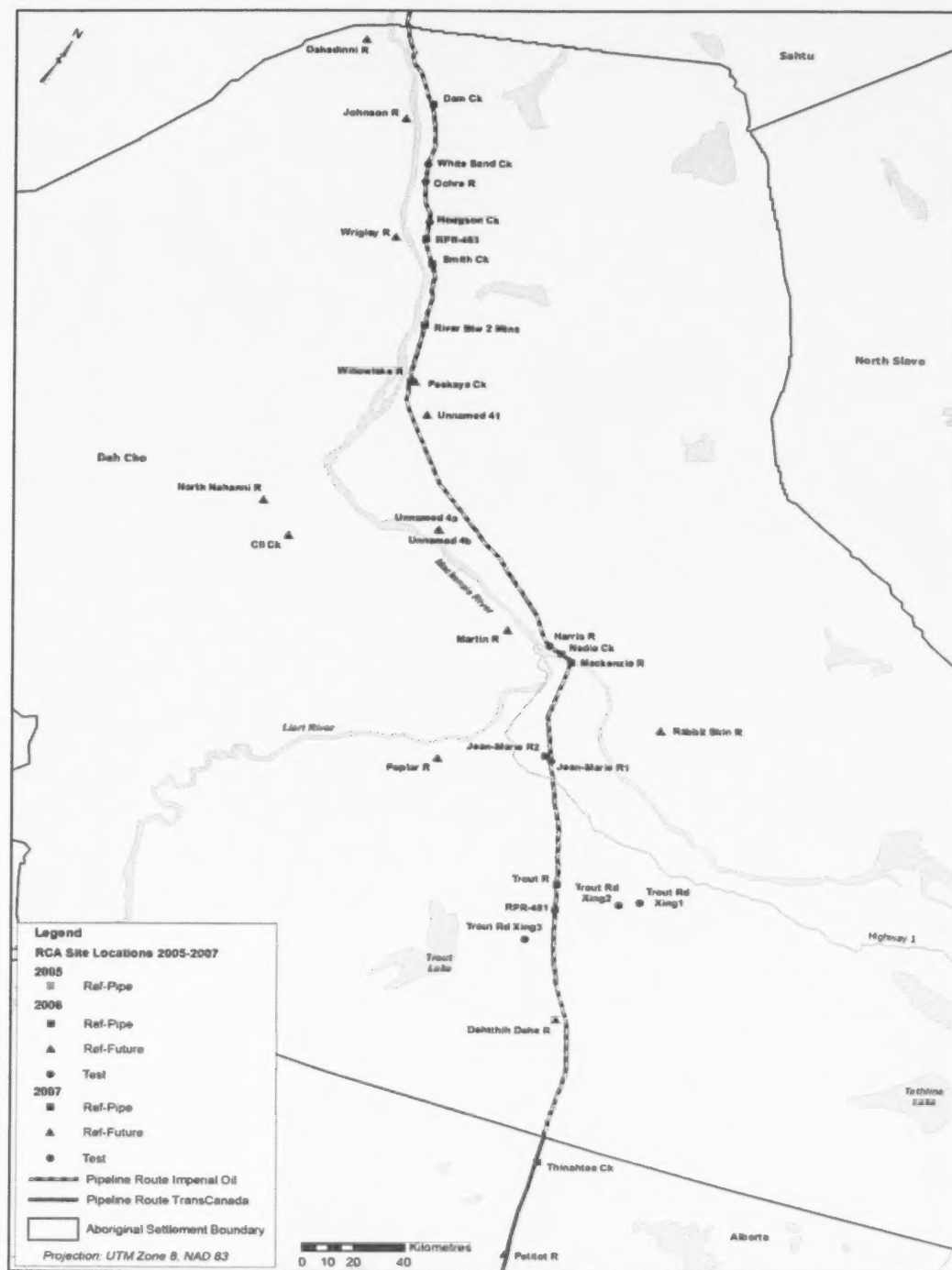


Figure 4. Streams sampled in the Dehcho Territory, Northwest Territories, and northern Alberta, 2005-2007. (Ch: Channel; R: River; Ck: Creek).

Appendix 1-1. Names and locations of sites sampled in the Mackenzie River Valley in 2005 following the Reference Condition Approach.

Year	Site Name	CABIN Site ID	Latitude	Longitude	Site Class
2005	Billy Ck	BILL299	65.34062	127.11773	Ref-Pipe
2005	Bosworth Ck	BOSW301	65.30450	126.88936	Ref-Pipe
2005	Canyon Ck	CANY306	65.22167	126.52735	Ref-Pipe
2005	Chick Ck	CHIC267	65.85490	128.13435	Ref-Pipe
2005	Donnelly R	DONN266	65.86929	128.18829	Ref-Pipe
2005	Elliot Ck	ELLI288	65.52296	127.62589	Ref-Pipe
2005	Francis Ck	FRAN308	65.20424	126.45719	Ref-Pipe
2005	Hanna R	HANN285	65.64166	127.80761	Ref-Pipe
2005	Heleva Ck	HELE310	65.19202	126.41962	Ref-Pipe
2005	Jackfish Ck	JACK253	66.26598	128.53647	Ref-Pipe
2005	Jungle Ridge Ck	JUNG325	65.06161	126.06162	Ref-Pipe
2005	Loon R	LOON232	66.48795	128.84915	Ref-Pipe
2005	Nota Ck	NOTA324	65.09041	126.09528	Ref-Pipe
2005	Oscar Ck	OSCA292	65.43859	127.43946	Ref-Pipe
2005	Prohibition Ck	PROH313	65.15309	126.30555	Ref-Pipe
2005	RPR-070	RPR070	68.16384	132.98435	Ref-Pipe
2005	RPR-075	RPR075	68.09439	132.83379	Ref-Pipe
2005	RPR-117	RPR117	67.66014	131.47155	Ref-Pipe
2005	RPR-271	RPR271	65.70852	127.88885	Test
2005	South Snafu Ck	SNAF261	65.98744	128.31813	Ref-Pipe
2005	Thunder R	THUN141	67.53472	130.84944	Ref-Pipe
2005	Tieda R	TIED221	66.66734	129.28854	Ref-Pipe
2005	Travaillant R	TRAV097	67.91500	132.20111	Ref-Pipe
2005	Vermillion Ck	VERM323	65.09033	126.14211	Ref-Pipe

Appendix 1-2. Names and locations of sites sampled in the Mackenzie River Valley in 2006 following the Reference Condition Approach.

Year	Site Name	CABIN Site ID	Latitude	Longitude	Site Class
2006	Big Lake Ck	BIGL1	67.49207	131.34878	Ref-Future
2006	Big Smith Ck	BGSM349	64.59288	124.80775	Ref-Pipe
2006	Brackett R	BRAC1	64.99935	125.46293	Ref-Future
2006	Campbell Ck	CAMPCK	68.28626	133.24774	Test
2006	Cli Ck	CLI1	61.96856	123.44014	Ref-Future
2006	Dahadinni R	DAHA1	63.94127	124.53331	Ref-Future
2006	Dam Ck	DAM381	63.78511	123.82858	Ref-Pipe
2006	Dehtthih Dehe R	DEHT1	60.45543	120.20337	Ref-Future
2006	Dodo Ck	DODO1	64.98593	127.28373	Ref-Future
2006	Douglas Ck	DOUG1	68.54773	133.86751	Ref-Future
2006	East Ch	EAST013	69.13242	134.31279	Ref-Pipe
2006	Fish Trap Ck	FISH1	67.97470	132.25623	Ref-Future
2006	Gossage Ck	GOSS1	66.94757	130.37155	Ref-Future
2006	Hans Ck	HANS036	68.77316	133.77153	Ref-Pipe
2006	Harry Ch	HARR002	69.37077	134.92788	Ref-Pipe
2006	Hodgson Ck	HODG399	63.33771	123.46335	Test
2006	Holmes Ck	HOLM1	69.08671	134.29621	Ref-Future
2006	Husky Ck	HUSK1	68.86833	133.58629	Ref-Future
2006	Jean-Marie R2	JEAN4752	61.45286	121.00783	Ref-Pipe
2006	Johnson R	JOHN1	63.69357	123.96627	Ref-Future
2006	Little Smith Ck	LTSM351	64.43454	124.74386	Ref-Pipe
2006	Martin R	MART1	61.88253	121.61667	Ref-Future
2006	Noell Ck	NOEL1	68.57946	133.58930	Ref-Future
2006	Petitot R	PETIAB22	59.50115	119.93666	Ref-Future
2006	Poplar R	POPL1	61.31400	121.72931	Ref-Future
2006	RPR-001	RPR001	69.36909	134.92383	Ref-Pipe
2006	Saline Ck	SALIN358	64.29131	124.50482	Ref-Pipe
2006	Sandy Ck	SAND1	67.84157	132.13046	Ref-Future
2006	Stanley Ck	STAN1	68.70769	133.44783	Ref-Future
2006	Steep Ck	STEEP371	64.18545	124.36406	Ref-Pipe
2006	Thinahtea Ck	THINAB07	59.89564	119.96856	Ref-Pipe
2006	Travaillant R	TRAV1	67.56575	131.43650	Ref-Future
2006	Trout R	TROU479	60.97816	120.57195	Ref-Pipe
2006	Wrigley R	WRIG1	63.23202	123.64206	Ref-Future
2006	Yaya R	YAYA007	69.22735	134.58003	Ref-Pipe
2006	Zed Ck	ZED001	68.95013	133.53928	Ref-Pipe

Appendix 1-3. Names and locations of sites sampled in the Mackenzie River Valley in 2007 following the Reference Condition Approach.

Year	Site Name	CABIN Site ID	Latitude	Longitude	Site Class
2007	Aklak Ch	AKLA002	69.32304	135.22085	Ref-Pipe
2007	Borrow 20.17	BOR2017	68.79306	134.17500	Ref-Pipe
2007	Campbell R	CAMP1	68.12759	133.64284	Ref-Future
2007	Harris R	HARR466	61.87850	121.29076	Ref-Pipe
2007	Jean-Marie R1	JEAN4751	61.44308	120.95114	Ref-Pipe
2007	Kuluarpak Ch	KULU006	69.36750	134.98794	Ref-Pipe
2007	Kumak Ch	KUMA001	69.32542	135.25534	Ref-Pipe
2007	Mackenzie R	MACK470	61.83965	121.09219	Ref-Pipe
2007	Nadia Ck	NADI468	61.86117	121.18180	Ref-Pipe
2007	North Nahanni R	NNAH1	62.07121	123.72441	Ref-Future
2007	Ochre R	OCHR391	63.48638	123.62388	Ref-Pipe
2007	Peekaya Ck	PEEK1	62.71269	123.03159	Ref-Future
2007	Rabbit Skin R	RABB1	61.67750	120.25778	Ref-Future
2007	River Btw 2 Mtns	RBTM419	62.94125	123.16034	Ref-Pipe
2007	RPR-005	RPR005	69.35253	134.85420	Ref-Pipe
2007	RPR-008	RPR008	69.20739	134.55158	Ref-Pipe
2007	RPR-011	RPR011	69.16385	134.37459	Ref-Pipe
2007	RPR-012	RPR012	69.15446	134.35643	Ref-Pipe
2007	RPR-046	RPR046	68.62670	133.60456	Ref-Pipe
2007	RPR-048	RPR048	68.61566	133.56477	Ref-Pipe
2007	RPR-059	RPR059	68.41694	133.24972	Ref-Pipe
2007	RPR-065	RPR065	68.32215	133.16198	Ref-Pipe
2007	RPR-069	RPR069	68.19593	133.04385	Ref-Pipe
2007	RPR-075	RPR075	68.09439	132.83379	Ref-Pipe
2007	RPR-099	RPR099	67.86929	132.04835	Ref-Pipe
2007	RPR-403	RPR403	63.26798	123.43059	Ref-Pipe
2007	RPR-481	RPR481	60.87968	120.51331	Ref-Pipe
2007	Smith Ck	SMIT410	63.18288	123.30524	Ref-Pipe
2007	Trout Rd Xing1	TRRD1	61.00139	119.95528	Test
2007	Trout Rd Xing2	TRRD2	60.96944	120.08944	Test
2007	Trout Rd Xing3	TRRD3	60.73361	120.64222	Test
2007	Unnamed 01	UNCK01	68.91532	133.81468	Ref-Future
2007	Unnamed 02	UNCK02	68.83959	133.76701	Ref-Future
2007	Unnamed 03	UNCK03	68.40038	133.30435	Ref-Future
2007	Unnamed 10	UNCK10	67.38477	130.92756	Ref-Future
2007	Unnamed 16	UNCK16	68.05170	133.41856	Ref-Future
2007	Unnamed 41	UNCK41	62.80154	122.84174	Ref-Future
2007	Unnamed 4A	UNCK4A	62.18058	122.40260	Test
2007	Unnamed 4B	UNCK4B	62.18022	122.40223	Ref-Future
2007	White Sand Ck	WHSD388	63.55345	123.66278	Test
2007	Willowake R	WILL428	62.71150	123.08223	Ref-Pipe
2007	Wood Bridge Ck	WOOD1	67.85134	132.16181	Ref-Future

Appendix 2. Field data sheets used for sampling streams in the Mackenzie River Valley following the Reference Condition Approach, 2005-2007.

DFO – Mackenzie River Valley CABIN Field Sheet

Field Crew _____ Site Code: _____
Sampling Date (D/M/Y) _____ QA/QC site (circle one): Yes / No

A. GENERAL INFORMATION

Stream name: _____ Region (ISR, GSA, SSA, DCT): _____

Description (bank access, channel morphology, disturbance...) _____

Latitude: _____ (deg/min/sec) OR _____ (decimal deg)

Longitude: _____ (deg/min/sec) OR _____ (decimal deg)

Altitude: _____ (metres above sea level) New Waypoint #: _____

B. PHOTOS (indicate photo # from camera's playback mode):

Station Sheet: U/S view _____ D/S view _____ Across channel _____ Aerial _____

Substrate (0.25 m² grid): Dry (exposed bar/bank) _____ AND/OR Aquatic _____

C. REACH CHARACTERISTICS

1. Habitat Types Present (circle all those present):

hydraulic jump chute rapids riffle run pool/back eddy debris dam

2. Habitat Types Sampled (circle one):

hydraulic jump chute rapids riffle run pool/back eddy debris dam

3. Over-Head Canopy Coverage (circle one):

0-25% 25-50% 50-75% 75-100%

4. Macrophyte Coverage (vascular plants including moss, NOT algae... circle one):

0-25% 25-50% 50-75% 75-100%

5. Riparian Vegetation (circle all those present):

barren - 1 grasses - 2 shrubs - 3 deciduous trees - 4 coniferous trees - 5

6. Dominant Riparian Vegetation (circle one):

barren - 1 grasses - 2 shrubs - 3 deciduous trees - 4 coniferous trees - 5



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DFO – Mackenzie River Valley CABIN Field Sheet

Field Crew _____ Site Code: _____

Sampling Date (D/M/Y) _____ QA/QC site (circle one): Yes / No

D. REACH SKETCH MAP

Sketch a site map showing channel pattern, reach characteristics, habitat features, location of cross-sections, location of invertebrate sample...)

E. WATER CHEMISTRY

Field Measurements:

Temp _____ pH _____ DO _____ mg/L _____ %

Turbidity _____ Conductivity _____

Water Samples (check as taken, label bottles with 4-letter code and date):

Metals (250mL) _____

*do not rinse bottle, add 2ml acid

Major Ions/Nutrients (1L) _____

*rinse bottle 2-3 times



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Welcome



DFO – Mackenzie River Valley CABIN Field Sheet

Field Crew _____ Site Code: _____
 Sampling Date (D/M/Y) _____ QA/QC site (circle one): Yes / No

F. BENTHIC INVERTEBRATE SAMPLES

Sample number	1	2 (Qa/Qc)*	3 (Qa/Qc)*
Operator			
Method (kicknet or Ponar)			
Sampling time (min)			
# of sample bags			
Typical sampling depth			

*3 samples only taken for Qa/Qc (10% of sites)

G. SUBSTRATE COMPOSITION AT INVERTEBRATE COLLECTION SITE:

Values for particle sizes and embeddedness (how deep in the substrate, not compactness) used to calculate substrate score.

PARTICLE TYPE / SIZE	Category
organic cover (>50% of surface)	1
<0.1 mm (silt)	2
0.1 - 2 mm (sand)	3
2 - 11 mm (fine gravel)	4
11 - 32 mm (medium gravel)	5
32 - 64 mm (coarse gravel)	6
64 - 120 mm (small cobble)	7
120 - 250 mm (large cobble)	8
> 250 mm (boulder)	9
Bedrock	10
EMBEDDEDNESS	
Completely embedded	1
3/4 embedded	2
1/2 embedded	3
1/4 embedded	4
unembedded	5

Visual method to determine substrate size

Substrate Score (See table)

i) *Particle Type / Size*

1. Dominant size (framework) _____

2. Sub-dominant particle size _____

3. Surrounding material size (matrix) _____

ii) *Embeddedness*

(depth of framework burial, not compactness)

Total Substrate Score _____

Random walk method to determine dominant substrate size (use gravelometer)

Rock #	1	2	3	4	5	6	7	8	9	10
b-axis (width)										
a-axis (length)										
Category*										
Rock #	11	12	13	14	15	16	17	18	19	20
b-axis (width)										
a-axis (length)										
Category*										

* see above table – based on B-AXIS of each rock



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Field Crew _____ Site Code: _____

Sampling Date (D/M/Y) _____ QA/QC site (circle one): Yes / No

H. CHANNEL MEASUREMENTS (to save time, complete only 1 cross-section when channel geometry is simple and uniform throughout the sample reach)Channel Slope: _____ %
(use clinometer)

Cross section 1 _____ (location relative to bug sample i.e. d/s, u/s)

Bankfull Width _____ (m) Wetted Stream Width: _____ (m)

Velocity / Depth	1	2	3	4	5
Distance from bank (m)					
Depth (cm)					
Velocity (m/s)					

Note: 3 equidistant locations only if wetted width is < 5m wide

Cross section 2 _____ (location relative to bug sample i.e. d/s, u/s)

Bankfull Width _____ (m) Wetted Stream Width: _____ (m)

Velocity / Depth	1	2	3	4	5
Distance from bank (m)					
Depth (cm)					
Velocity (m/s)					

Note: 3 equidistant locations only if wetted width is < 5m wide

Cross section 3 _____ (location relative to bug sample i.e. d/s, u/s)

Bankfull Width _____ (m) Wetted Stream Width: _____ (m)

Velocity / Depth	1	2	3	4	5
Distance from bank (m)					
Depth (cm)					
Velocity (m/s)					

Note: 3 equidistant locations only if wetted width is < 5m wide

Maximum Depth (cm): _____ Average Depth (cm): _____

Maximum Velocity (m/s): _____ Average Velocity (m/s): _____

Average Bankfull Width (m): _____ Average Wetted Width (m): _____

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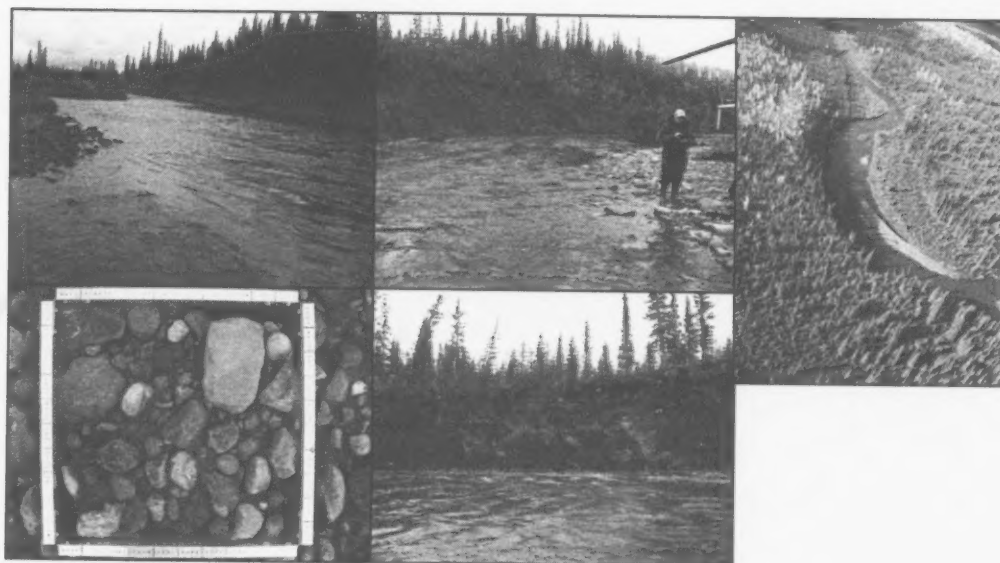
Appendix 3. Summary information and photographs for each of the 102 sample sites sampled in the Mackenzie River Valley following the Reference Condition Approach.

Aklak Channel



CABIN Site ID	AKLA002
Stream Name	Aklak Ch
Pipeline Crossing ID	RNT-002
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	69.32306
Longitude	-135.22084
Elevation (m)	0
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Alluvial Deposits
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	39
Wetted Width (m)	37
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

Big Lake Creek



CABIN Site ID	BIGL1
Stream Name	Big Lake Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Gwich'in
Latitude	67.49206
Longitude	-131.34879
Elevation (m)	61
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	27
Wetted Width (m)	15
Habitats Present	Riffle, Run, Pool
Dominant Substrate	11-32 mm (medium gravel)

Big Smith Creek



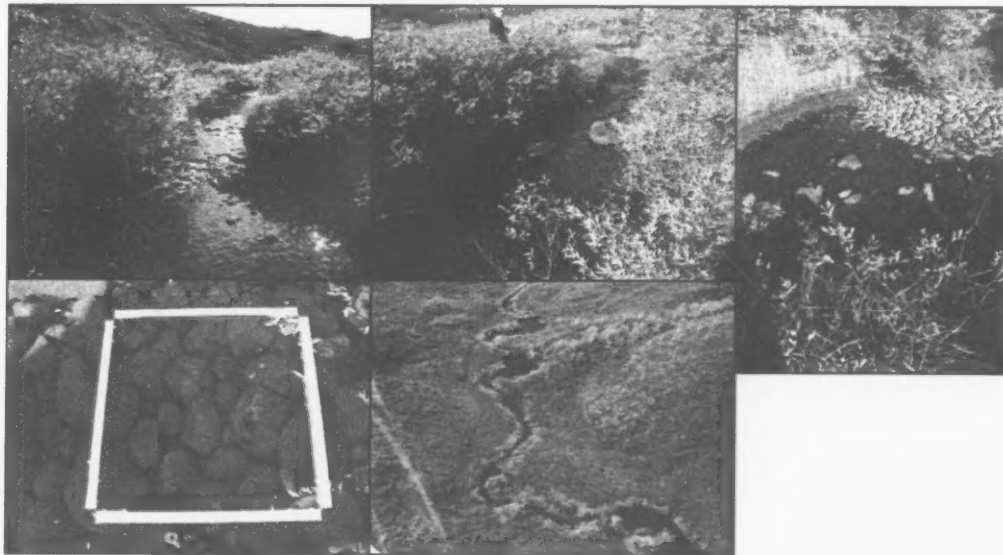
CABIN Site ID	BGSM349
Stream Name	Big Smith Ck
Pipeline Crossing ID	RPR-349
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	64.59289
Longitude	-124.80775
Elevation (m)	109
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2006
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	36
Wetted Width (m)	21.6
Habitats Present	Run and Pool
Dominant Substrate	1-2 mm (medium, coarse sand)

Billy Creek



CABIN Site ID	BILL299
Stream Name	Billy Ck
Pipeline Crossing ID	RPR-299
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.34111
Longitude	-127.11806
Elevation (m)	60
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	9
Wetted Width (m)	6
Habitats Present	Run, Pool, Debris Dam
Dominant Substrate	Organic cover

Borrow 20.17



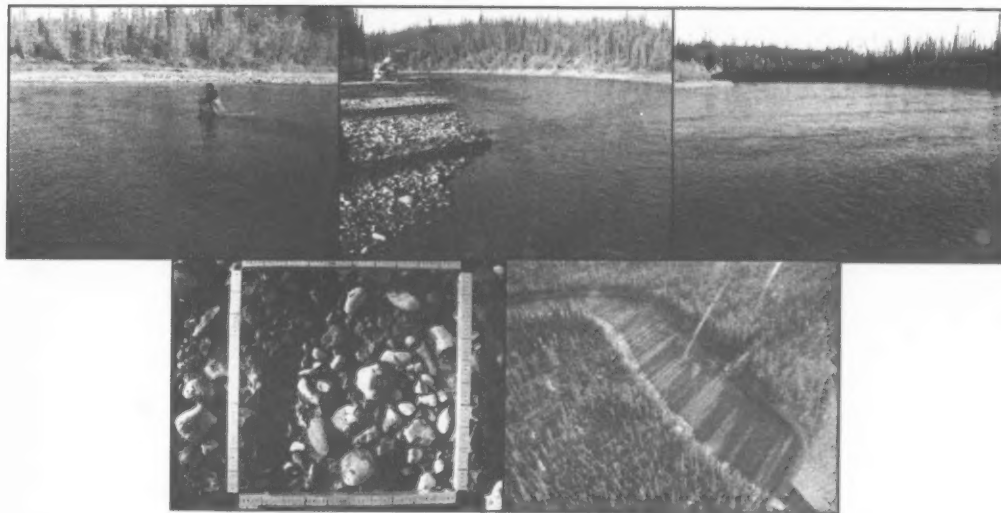
CABIN Site ID	BOR2017
Stream Name	Borrow 20.17
Pipeline Crossing ID	n/a
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	68.79305
Longitude	-134.17500
Elevation (m)	82
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	3.6
Wetted Width (m)	2.8
Habitats Present	Riffle, Run, Pool
Dominant Substrate	32-64 mm (coarse gravel)

Bosworth Creek



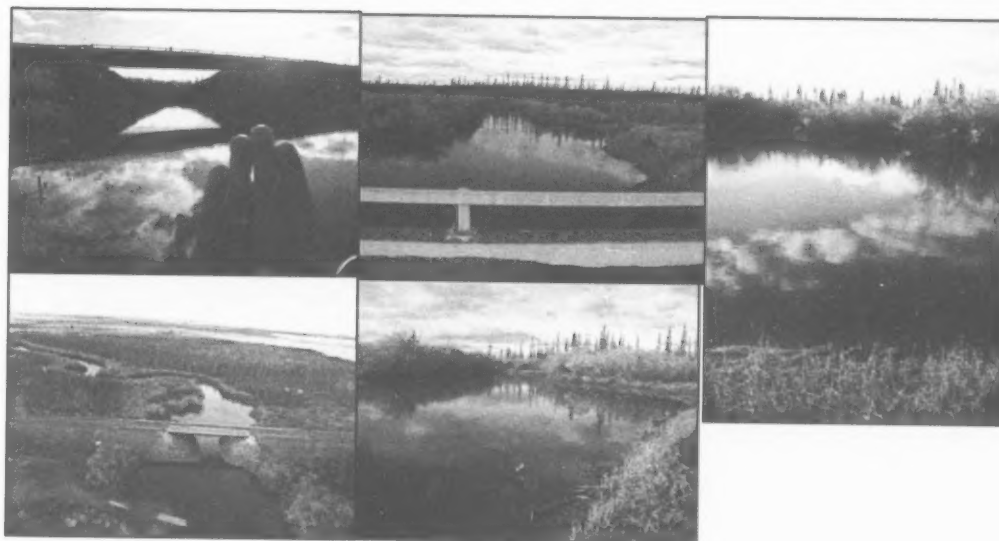
CABIN Site ID	BOSW301
Stream Name	Bosworth Ck
Pipeline Crossing ID	RPR-301
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.30500
Longitude	-126.88889
Elevation (m)	60
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	20
Wetted Width (m)	15
Habitats Present	Riffle and Run
Dominant Substrate	32-64 mm (coarse gravel)

Brackett River



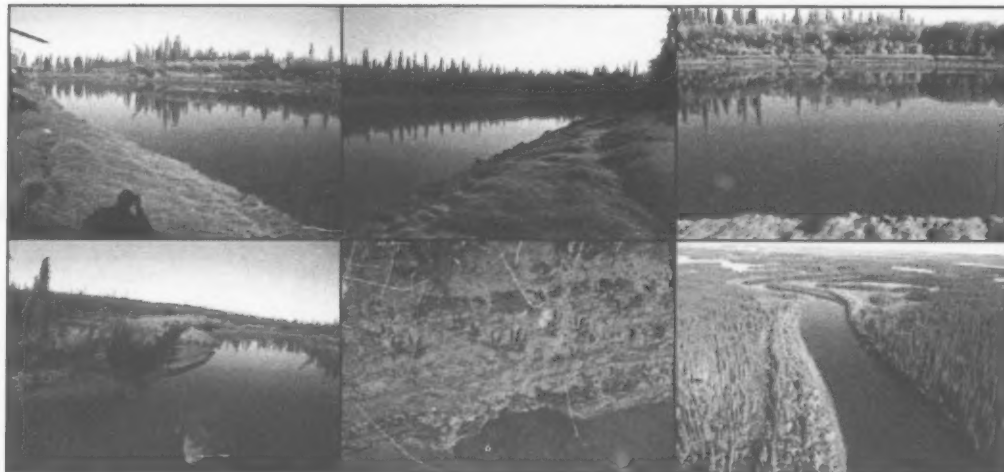
CABIN Site ID	BRAC1
Stream Name	Brackett R
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Sahtu
Latitude	64.99936
Longitude	-125.46291
Elevation (m)	91
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	57
Wetted Width (m)	39.6
Habitats Present	Run
Dominant Substrate	11-32 mm (coarse gravel)

Campbell Creek



CABIN Site ID	CAMPCK
Stream Name	Campbell Ck
Pipeline Crossing ID	n/a
Site Class	Test
Territorial Region	Gwich'in
Latitude	68.28625
Longitude	-133.24776
Elevation (m)	66
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	38
Wetted Width (m)	32
Habitats Present	Pool/Back eddy
Dominant Substrate	<1 mm (clay, silt, fine sand)

Campbell River



CABIN Site ID	CAMP1
Stream Name	Campbell R
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Gwich'in
Latitude	68.12750
Longitude	-133.64278
Elevation (m)	17
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Alluvial Deposits
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	79
Wetted Width (m)	77
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

Canyon Creek



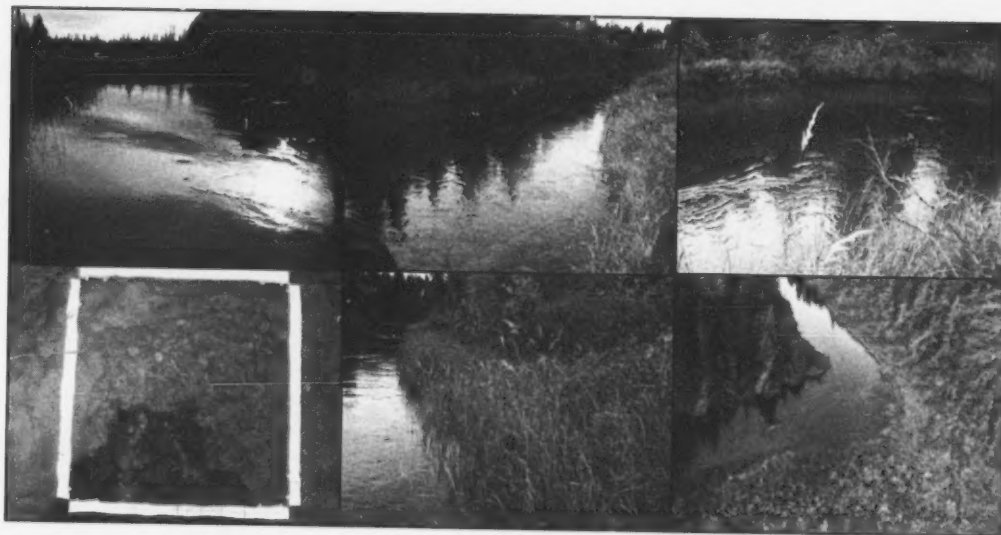
CABIN Site ID	CANY306
Stream Name	Canyon Ck
Pipeline Crossing ID	RPR-306
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.22195
Longitude	-126.52695
Elevation (m)	66
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Coarse-grained (Glacio) Lacustrine
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	20
Wetted Width (m)	5
Habitats Present	Riffle and Run
Dominant Substrate	32-64 mm (coarse gravel)

Chick Creek



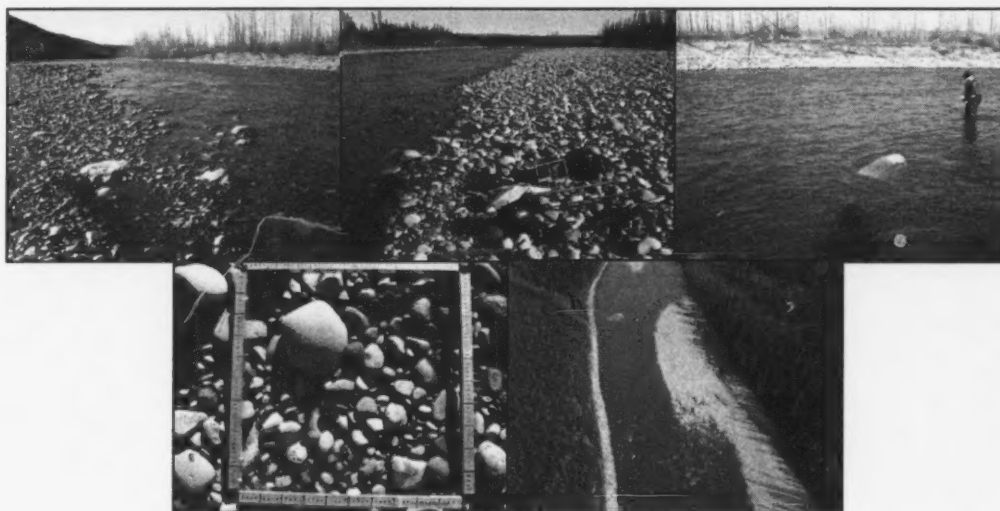
CABIN Site ID	CHIC267
Stream Name	Chick Ck
Pipeline Crossing ID	RPR-267
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.85500
Longitude	-128.13390
Elevation (m)	138
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Coarse-grained (Glacio) Lacustrine
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	6
Wetted Width (m)	3
Habitats Present	Riffle and Pool
Dominant Substrate	64-120 mm (small cobble)

Cli Creek



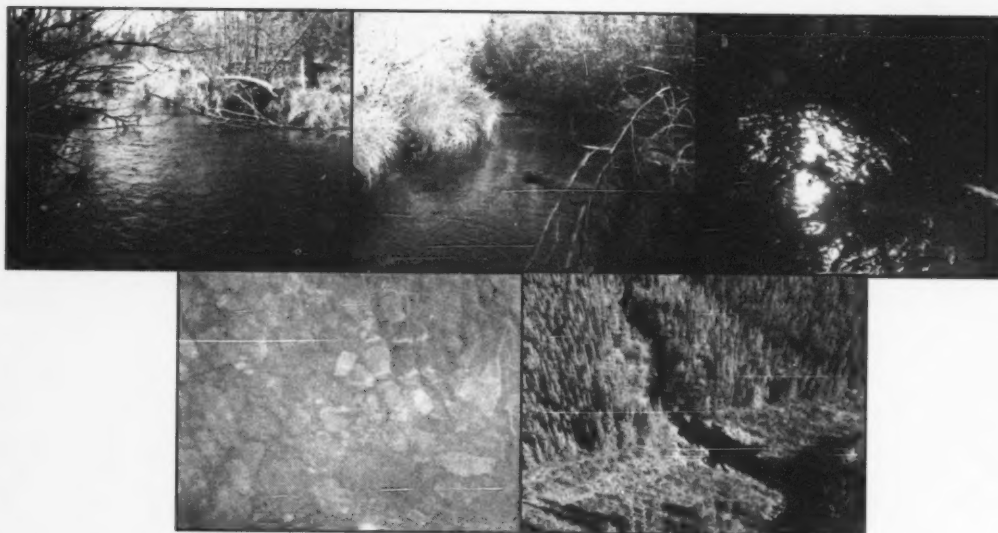
CABIN Site ID	CLI1
Stream Name	Cli Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	61.96856
Longitude	-123.44014
Elevation (m)	252
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	10
Wetted Width (m)	10
Habitats Present	Run
Dominant Substrate	11-32 mm (medium gravel)

Dahadinni River



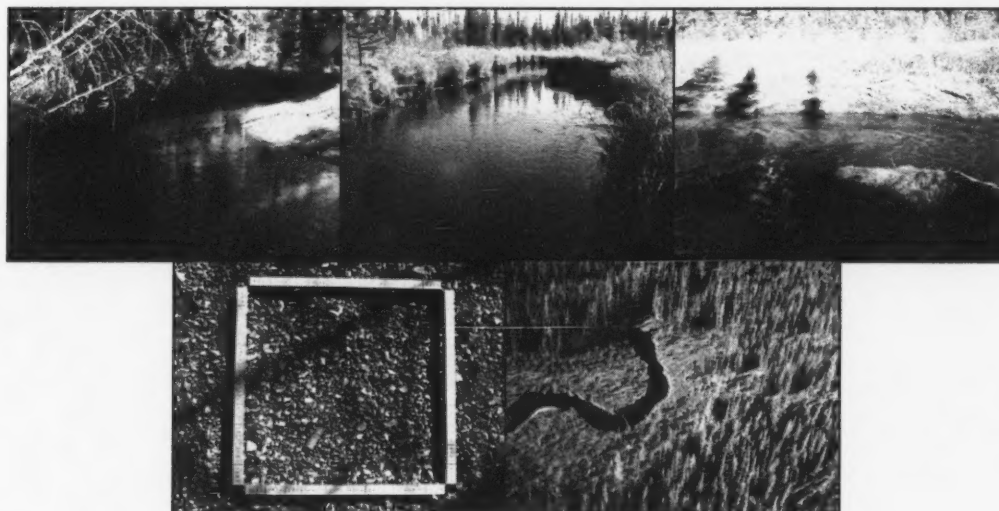
CABIN Site ID	DAHA1
Stream Name	Dahadinni R
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	63.94128
Longitude	-124.53330
Elevation (m)	117
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	103
Wetted Width (m)	46
Habitats Present	Riffle and Run
Dominant Substrate	11-32 mm (medium gravel)

Dam Creek



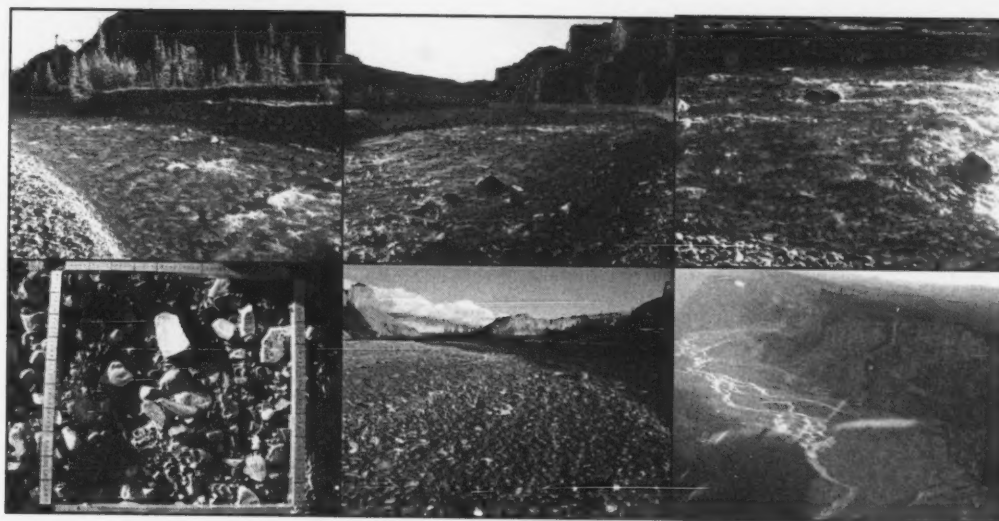
CABIN Site ID	DAM 381
Stream Name	Dam Ck
Pipeline Crossing ID	RPR-381
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	63.78511
Longitude	-123.82858
Elevation (m)	198
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	7
Wetted Width (m)	4
Habitats Present	Run and Pool
Dominant Substrate	11-32 mm (medium gravel)

Dehtthih Dehe River



CABIN Site ID	DEHT1
Stream Name	Dehtthih Dehe R
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	60.45547
Longitude	-120.20339
Elevation (m)	624
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Grasses
Bankfull Width (m)	7
Wetted Width (m)	4.5
Habitats Present	Run and Pool
Dominant Substrate	2-11 mm (fine gravel)

Dodo Creek



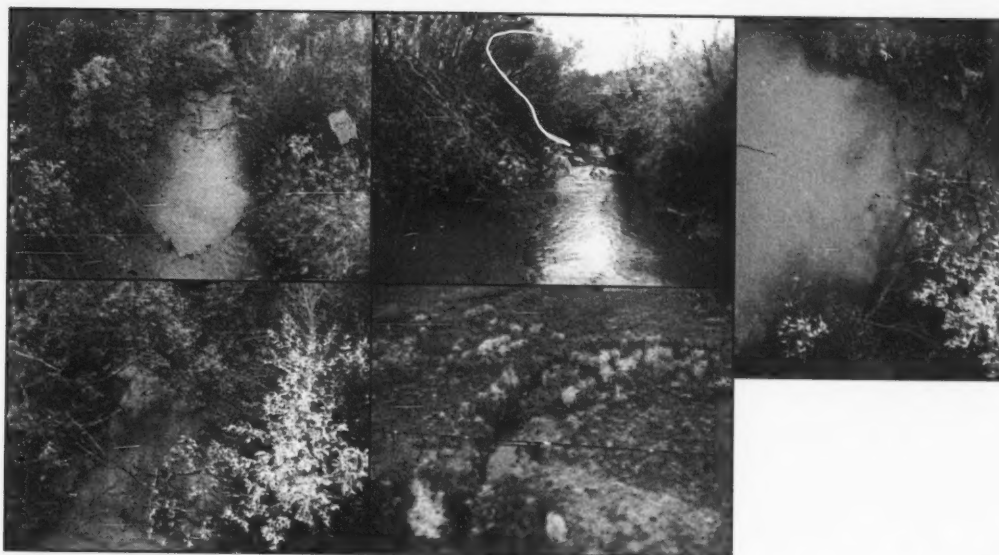
CABIN Site ID	DODO1
Stream Name	Dodo Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Sahtu
Latitude	64.98595
Longitude	-127.28372
Elevation (m)	328
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Veneer
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Sand or Gravel
Bankfull Width (m)	37.6
Wetted Width (m)	12.3
Habitats Present	Riffle
Dominant Substrate	11-32 mm (medium gravel)

Donnelly River



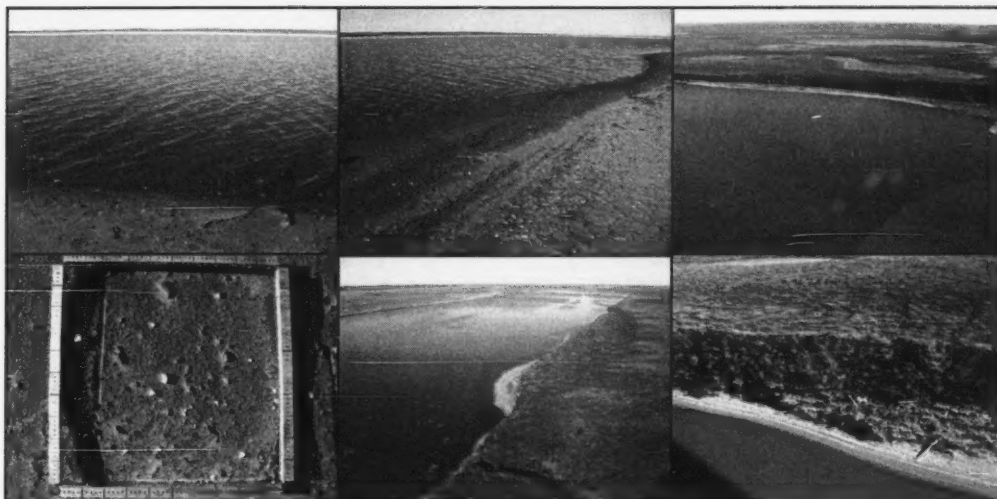
CABIN Site ID	DONN266
Stream Name	Donnelly R
Pipeline Crossing ID	RPR-266
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.86889
Longitude	-128.18805
Elevation (m)	124
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Coarse-grained (Glacio) Lacustrine
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Grasses
Bankfull Width (m)	60
Wetted Width (m)	30
Habitats Present	Riffle and Run
Dominant Substrate	64-120 mm (small cobble)

Douglas Creek



CABIN Site ID	DOUG 1
Stream Name	Douglas Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Gwich'in
Latitude	68.54772
Longitude	-133.86749
Elevation (m)	9
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Veneer
Sampling Year(s)	2006
Sampling Device	Ponar
Dominant Riparian	Deciduous trees
Bankfull Width (m)	5.2
Wetted Width (m)	4.7
Habitats Present	Run and Pool
Dominant Substrate	2-11 mm (fine gravel)

East Channel



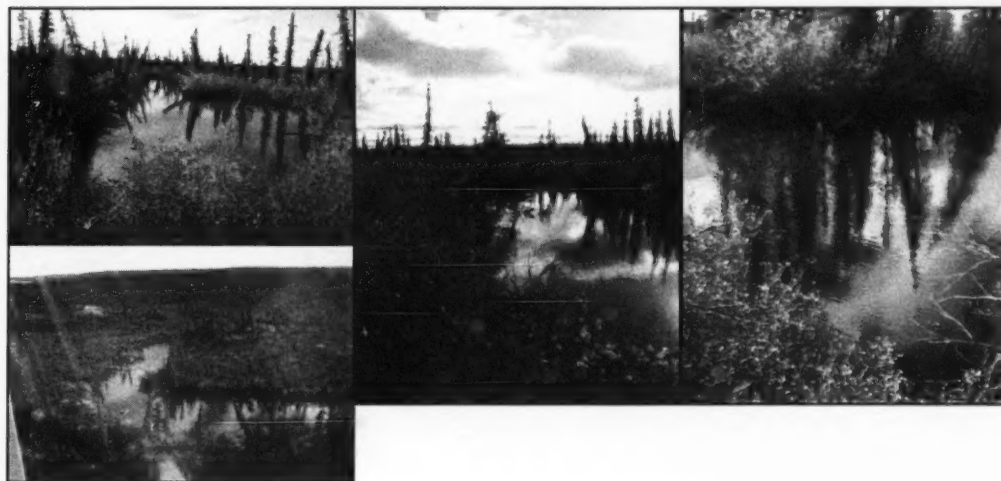
CABIN Site ID	EAST013
Stream Name	East Ch
Pipeline Crossing ID	RPR-013
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	69.13242
Longitude	-134.31277
Elevation (m)	4
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Alluvial Deposits
Sampling Year(s)	2006
Sampling Device	Ponar
Dominant Riparian	Sand or Gravel
Bankfull Width (m)	324
Wetted Width (m)	307
Habitats Present	Run
Dominant Substrate	1-2 mm (medium, coarse sand)

Elliot Creek



CABIN Site ID	ELLI288
Stream Name	Elliot Ck
Pipeline Crossing ID	RPR-288
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.52306
Longitude	-127.62611
Elevation (m)	60
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	15
Wetted Width (m)	7
Habitats Present	Riffle and Run
Dominant Substrate	11-32 mm (medium gravel)

Fish Trap Creek



CABIN Site ID	FISH1
Stream Name	Fish Trap Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Gwich'in
Latitude	67.97469
Longitude	-132.25623
Elevation (m)	206
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	17
Wetted Width (m)	14
Habitats Present	Pool/Back eddy
Dominant Substrate	<1 mm (clay, silt, fine sand)

Francis Creek



CABIN Site ID	FRAN308
Stream Name	Francis Ck
Pipeline Crossing ID	RPR-308
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.20417
Longitude	-126.45722
Elevation (m)	79
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Coarse-grained (Glacio) Lacustrine
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	8
Wetted Width (m)	3
Habitats Present	Riffle and Run
Dominant Substrate	32-64 mm (coarse gravel)

Gossage Creek



CABIN Site ID	GOSS1
Stream Name	Gossage Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Sahtu
Latitude	66.94756
Longitude	-130.37155
Elevation (m)	39
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	14.5
Wetted Width (m)	11
Habitats Present	Riffle and Pool
Dominant Substrate	11-32 mm (medium gravel)

Hanna River



CABIN Site ID	HANN285
Stream Name	Hanna R
Pipeline Crossing ID	RPR-285
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.64194
Longitude	-127.80805
Elevation (m)	99
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	25
Wetted Width (m)	12
Habitats Present	Riffle, Run, Pool
Dominant Substrate	11-32 mm (medium gravel)

Hans Creek



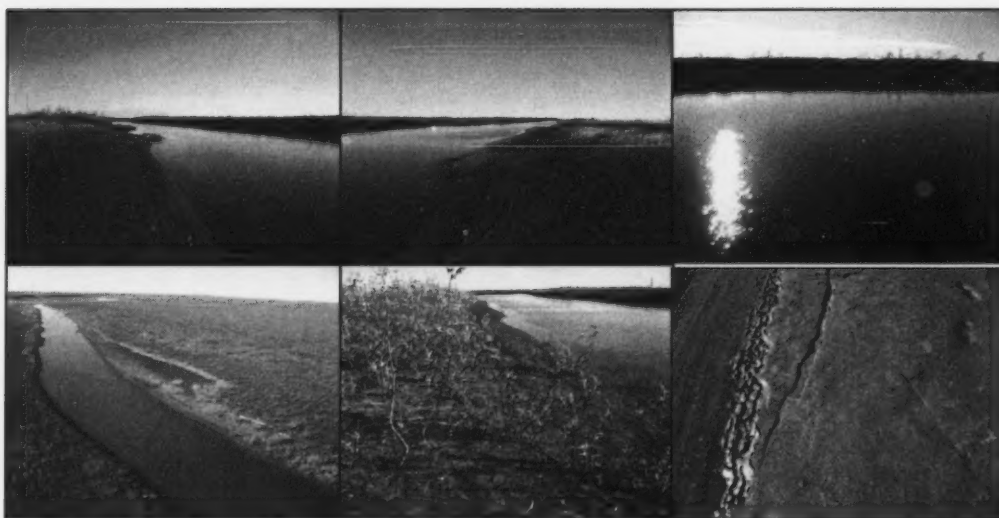
CABIN Site ID	HANS036
Stream Name	Hans Ck
Pipeline Crossing ID	RPR-036
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	68.77316
Longitude	-133.77153
Elevation (m)	54
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	8.3
Wetted Width (m)	7.3
Habitats Present	Run and Pool
Dominant Substrate	<1 mm (clay, silt, fine sand)

Harris River



CABIN Site ID	HARR466
Stream Name	Harris R
Pipeline Crossing ID	RPR-466
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	61.87861
Longitude	-121.29083
Elevation (m)	124
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Deciduous trees
Bankfull Width (m)	20
Wetted Width (m)	11.3
Habitats Present	Riffle, Run, Pool
Dominant Substrate	32-64 mm (coarse gravel)

Harry Channel



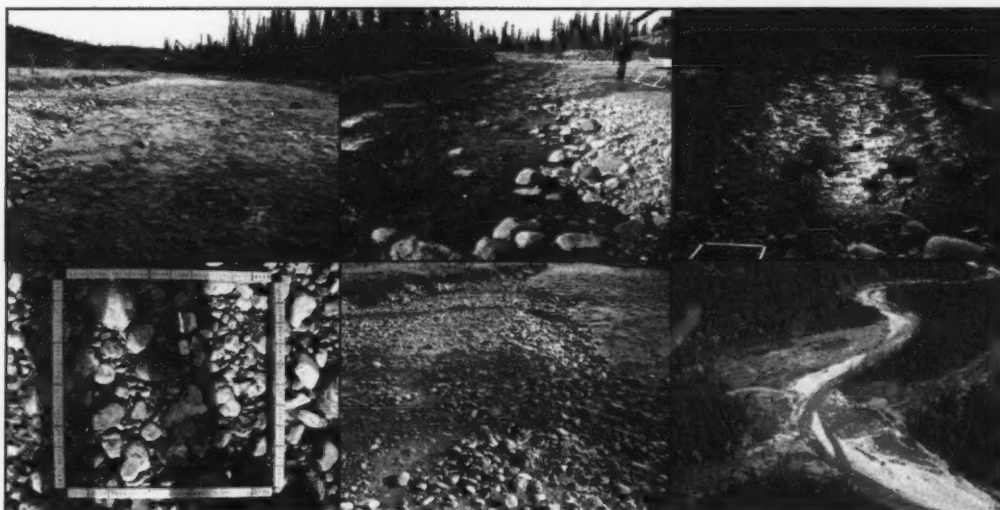
CABIN Site ID	HARR002
Stream Name	Harry Channel
Pipeline Crossing ID	RPR-002
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	69.37078
Longitude	-134.92789
Elevation (m)	0
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Alluvial Deposits
Sampling Year(s)	2006
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	53.3
Wetted Width (m)	31.6
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

Heleva Creek



CABIN Site ID	HELE310
Stream Name	Heleva Ck
Pipeline Crossing ID	RPR-310
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.19195
Longitude	-126.42000
Elevation (m)	75
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Coarse-grained (Glacio) Lacustrine
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	5
Wetted Width (m)	3
Habitats Present	Riffle and Pool
Dominant Substrate	32-64 mm (coarse gravel)

Hodgson Creek



CABIN Site ID	HODG399
Stream Name	Hodgson Ck
Pipeline Crossing ID	RPR-399
Site Class	Test
Territorial Region	Dehcho
Latitude	63.33772
Longitude	-123.46336
Elevation (m)	240
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	25.6
Wetted Width (m)	10.3
Habitats Present	Rapids and Riffle
Dominant Substrate	11-32 mm (medium gravel)

Holmes Creek



CABIN Site ID	HOLM1
Stream Name	Holmes Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Inuvialuit
Latitude	69.08672
Longitude	-134.29619
Elevation (m)	15
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Glaciofluvial Complex
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	14.2
Wetted Width (m)	11.2
Habitats Present	Run and Pool
Dominant Substrate	1-2 mm (medium and coarse sand)

Husky Creek



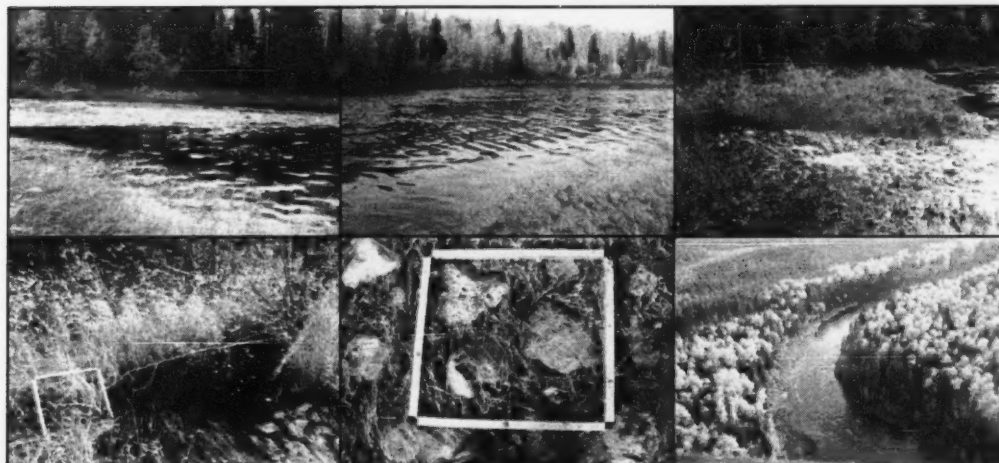
CABIN Site ID	HUSK1
Stream Name	Husky Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Inuvialuit
Latitude	68.86833
Longitude	-133.58627
Elevation (m)	28
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Glaciofluvial Complex
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	31
Wetted Width (m)	13.4
Habitats Present	Riffle, Run, Pool
Dominant Substrate	11-32 mm (medium gravel)

Jackfish Creek



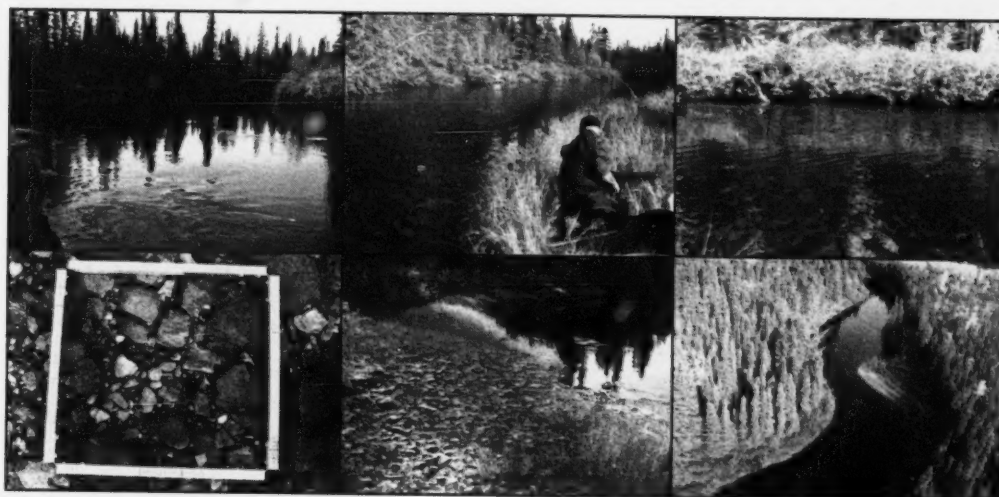
CABIN Site ID	JACK253
Stream Name	Jackfish Ck
Pipeline Crossing ID	RPR-253
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	66.26611
Longitude	-128.53612
Elevation (m)	45
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Coarse-grained (Glacio) Lacustrine
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Grasses
Bankfull Width (m)	8
Wetted Width (m)	6
Habitats Present	Run, Pool, Debris Dam
Dominant Substrate	Organic cover

Jean-Marie River-1



CABIN Site ID	JEAN4751
Stream Name	Jean-Marie R1
Pipeline Crossing ID	RPR-475
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	61.44305
Longitude	-120.95111
Elevation (m)	191
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Coarse-grained (Glacio) Lacustrine
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	27
Wetted Width (m)	24
Habitats Present	Riffle and Run
Dominant Substrate	>250 mm (boulder)

Jean-Marie River-2



CABIN Site ID	JEAN4752
Stream Name	Jean-Marie R2
Pipeline Crossing ID	RPR-475
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	61.45286
Longitude	-121.00784
Elevation (m)	191
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Coarse-grained (Glacio) Lacustrine
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	24.6
Wetted Width (m)	24
Habitats Present	Run and Pool
Dominant Substrate	32-64 mm (coarse gravel)

Johnson River



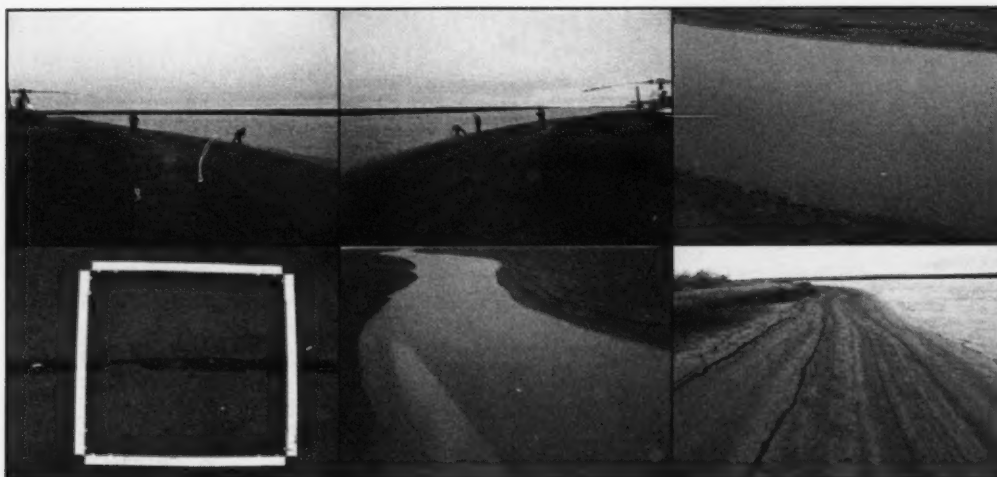
CABIN Site ID	JOHN1
Stream Name	Johnson R
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	63.6936
Longitude	-123.9662
Elevation (m)	100
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	96
Wetted Width (m)	44.5
Habitats Present	Riffle and Run
Dominant Substrate	32-64 mm (coarse gravel)

Jungle Ridge Creek



CABIN Site ID	JUNG325
Stream Name	Jungle Ridge Ck
Pipeline Crossing ID	RPR-325
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.06194
Longitude	-126.06194
Elevation (m)	105
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	5
Wetted Width (m)	3.5
Habitats Present	Chute and Pool
Dominant Substrate	64-120 mm (small cobble)

Kuluarpak Channel



CABIN Site ID	KULU006
Stream Name	Kuluarpak Ch
Pipeline Crossing ID	RNT-006
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	69.36750
Longitude	-134.98778
Elevation (m)	4
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Alluvial Deposits
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	90
Wetted Width (m)	80
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

Kumak Channel



CABIN Site ID	KUMA001
Stream Name	Kumak Ch
Pipeline Crossing ID	RNT-001
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	69.32555
Longitude	-135.25528
Elevation (m)	0
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Alluvial Deposits
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Sand or Gravel
Bankfull Width (m)	>200
Wetted Width (m)	>200
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

Little Smith Creek



CABIN Site ID	LTSM351
Stream Name	Little Smith Ck
Pipeline Crossing ID	RPR-351
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	64.434525
Longitude	-124.74386
Elevation (m)	148
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	26.1
Wetted Width (m)	16.3
Habitats Present	Riffle, Run, Pool
Dominant Substrate	11-32 mm (medium gravel)

Loon River



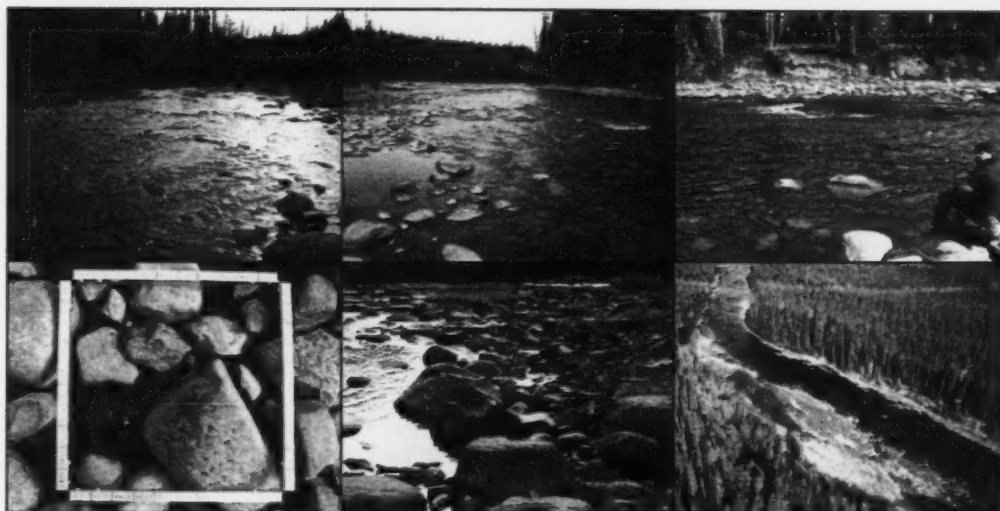
CABIN Site ID	LOON232
Stream Name	Loon R
Pipeline Crossing ID	RPR-232
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	66.48805
Longitude	-128.84889
Elevation (m)	46
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	60
Wetted Width (m)	40
Habitats Present	Riffle and Run
Dominant Substrate	64-120 mm (small cobble)

Mackenzie River



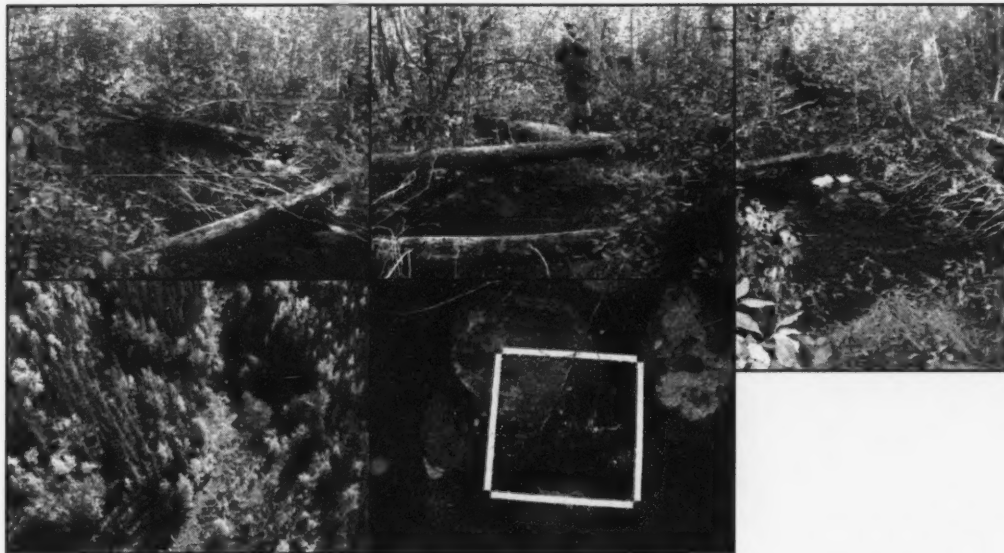
CABIN Site ID	MACK470
Stream Name	Mackenzie R
Pipeline Crossing ID	RPR-470
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	61.83972
Longitude	-121.09222
Elevation (m)	115
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Deciduous trees
Bankfull Width (m)	>1000
Wetted Width (m)	>1000
Habitats Present	Run
Dominant Substrate	64-120 mm (small cobble)

Martin River



CABIN Site ID	MART1
Stream Name	Martin River
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	DEC
Latitude	61.88253
Longitude	-121.61667
Elevation (m)	135
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Coarse-grained (Glacio) Lacustrine
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	39.3
Wetted Width (m)	30
Habitats Present	Rapids and Riffle
Dominant Substrate	64-120 mm (small cobble)

Nadia Creek



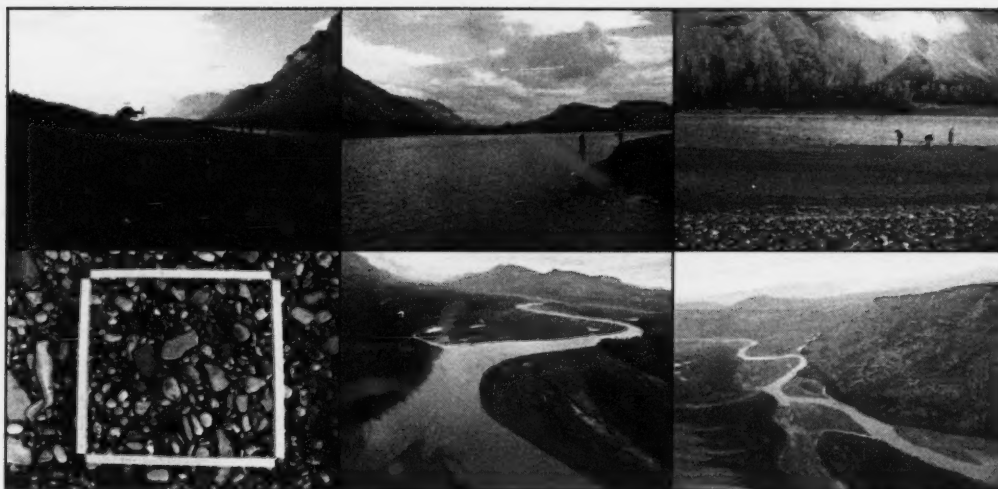
CABIN Site ID	NADI468
Stream Name	Nadia Ck
Pipeline Crossing ID	RPR-468
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	61.86111
Longitude	-121.18166
Elevation (m)	121
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	6.4
Wetted Width (m)	5
Habitats Present	Run and Pool
Dominant Substrate	>250 mm (boulder)

Noell Creek



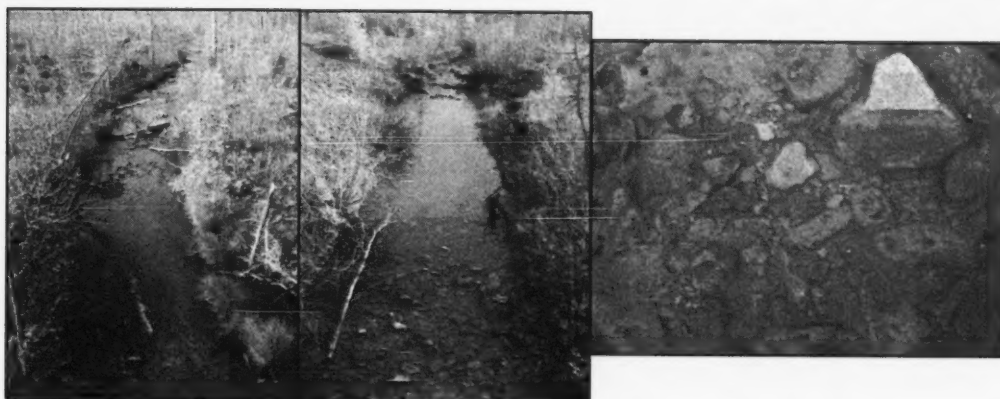
CABIN Site ID	NOEL1
Stream Name	Noell Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Inuvialuit
Latitude	68.57948
Longitude	-133.58931
Elevation (m)	64
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	14.5
Wetted Width (m)	5.7
Habitats Present	Chute and Pool
Dominant Substrate	32-64 mm (coarse gravel)

North Nahanni River



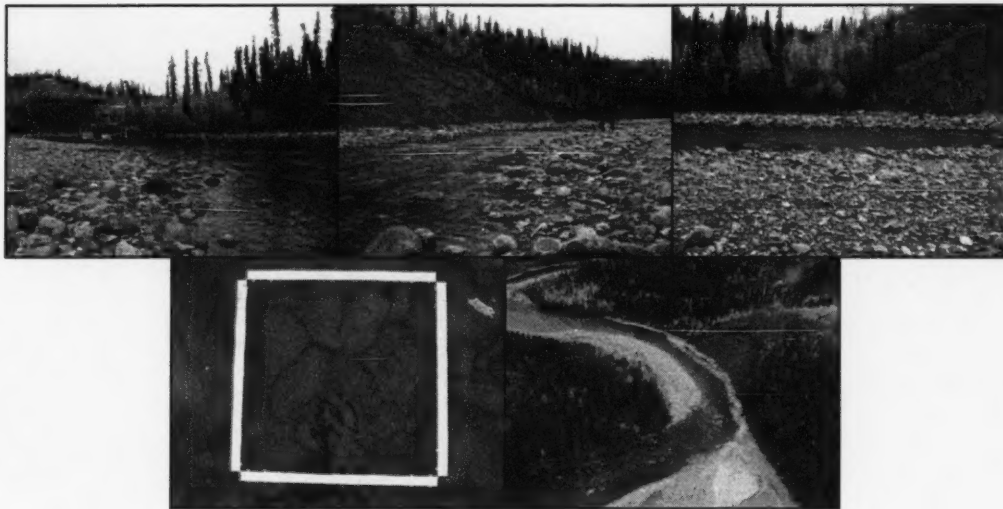
CABIN Site ID	NNAH1
Stream Name	North Nahanni R
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	62.07111
Longitude	-123.72444
Elevation (m)	171
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Till Veneer
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Deciduous trees
Bankfull Width (m)	147
Wetted Width (m)	82
Habitats Present	Run
Dominant Substrate	11-32 mm (medium gravel)

Nota Creek



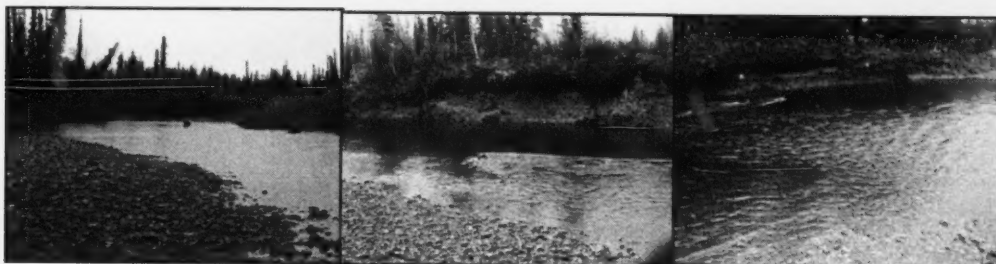
CABIN Site ID	NOTA324
Stream Name	Nota Ck
Pipeline Crossing ID	RPR-324
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.09000
Longitude	-126.09500
Elevation (m)	116
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	5
Wetted Width (m)	3
Habitats Present	Riffle and Run
Dominant Substrate	32-64 mm (coarse gravel)

Ochre River



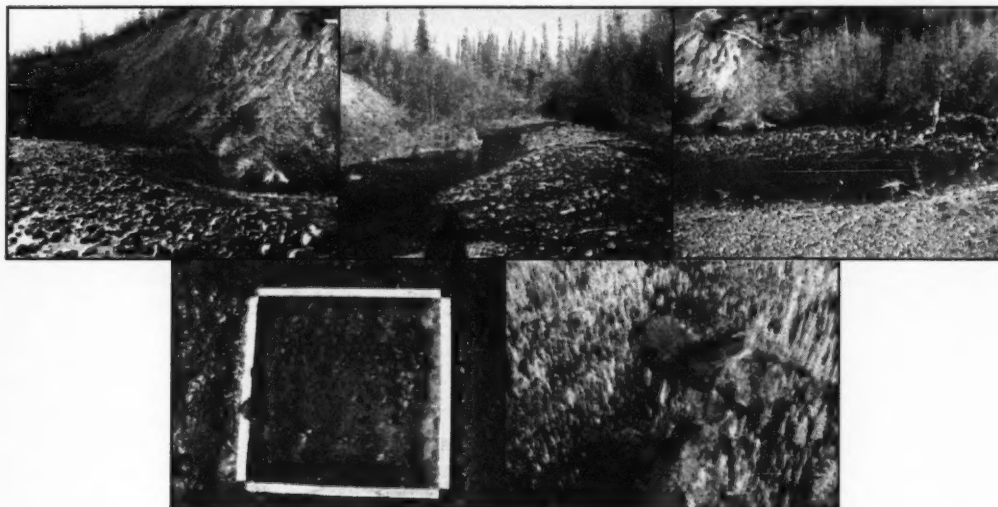
CABIN Site ID	OCHR391
Stream Name	Ochre R
Pipeline Crossing ID	RPR-391
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	63.48639
Longitude	-123.62389
Elevation (m)	138
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Sand or Gravel
Bankfull Width (m)	54.5
Wetted Width (m)	26
Habitats Present	Rapids, Riffle, Run, Pool
Dominant Substrate	64-120 mm (small cobble)

Oscar Creek



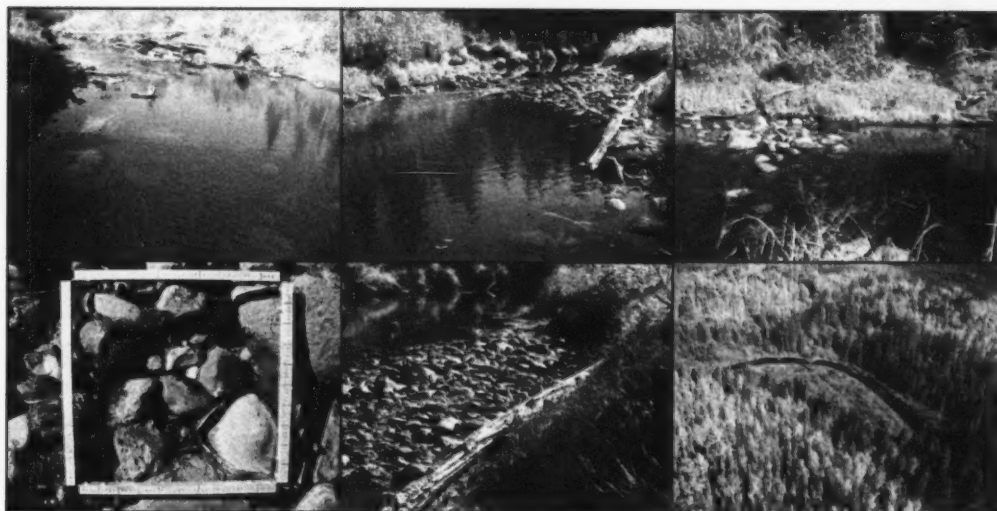
CABIN Site ID	OSCA292
Stream Name	Oscar Ck
Pipeline Crossing ID	RPR-292
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.43889
Longitude	-127.43889
Elevation (m)	59
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	25
Wetted Width (m)	15
Habitats Present	Riffle, Run, Pool
Dominant Substrate	11-32 mm (medium gravel)

Peekaya Creek



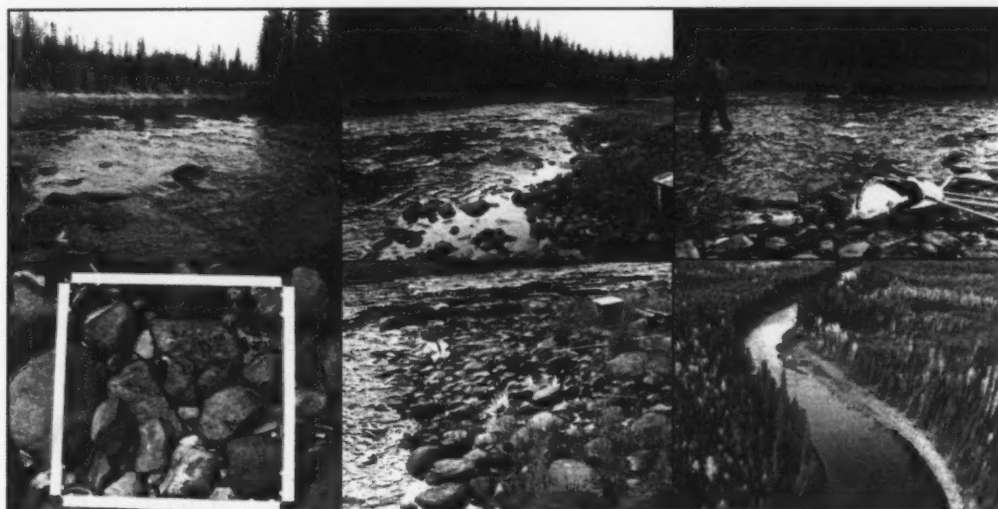
CABIN Site ID	PEEK1
Stream Name	Peekaya Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	62.71278
Longitude	-123.03167
Elevation (m)	152
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	12.3
Wetted Width (m)	12.3
Habitats Present	Riffle, Run, Pool
Dominant Substrate	32-64 mm (coarse gravel)

Petitot River



CABIN Site ID	PETIAB22
Stream Name	Petitot R
Pipeline Crossing ID	NWTL-22
Site Class	Ref-Future
Territorial Region	Alberta
Latitude	59.50114
Longitude	-119.93667
Elevation (m)	542
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Grasses
Bankfull Width (m)	10.3
Wetted Width (m)	8
Habitats Present	Riffle and Pool
Dominant Substrate	32-64 mm (coarse gravel)

Poplar River



CABIN Site ID	POPL1
Stream Name	Poplar R
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	61.31400
Longitude	-121.72931
Elevation (m)	244
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Grasses
Bankfull Width (m)	26.6
Wetted Width (m)	23.3
Habitats Present	Riffle, Run, Pool
Dominant Substrate	32-64 mm (coarse gravel)

Prohibition Creek



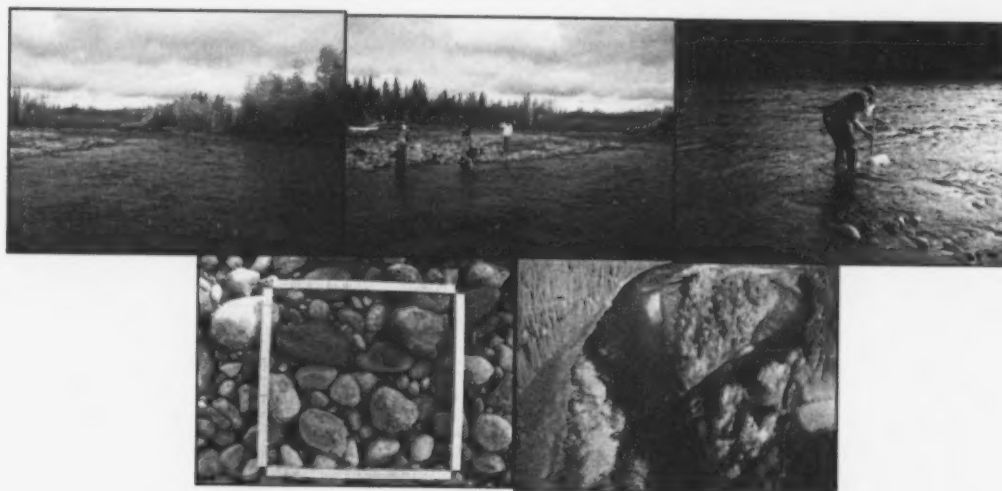
CABIN Site ID	PROH313
Stream Name	Prohibition Ck
Pipeline Crossing ID	RPR-313
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.15305
Longitude	-126.30611
Elevation (m)	83
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	18
Wetted Width (m)	5
Habitats Present	Riffle, Run, Pool
Dominant Substrate	120-250 mm (large cobble)

Rabbit Skin River



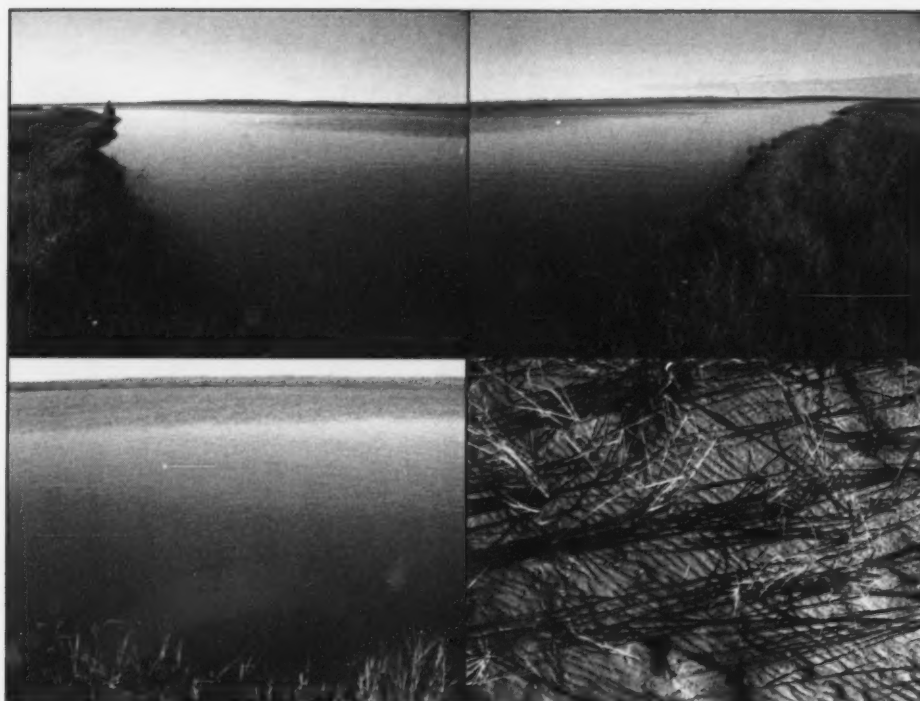
CABIN Site ID	RABB1
Stream Name	Rabbit Skin R
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	61.67750
Longitude	-120.25777
Elevation (m)	175
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Grasses
Bankfull Width (m)	29.6
Wetted Width (m)	16.1
Habitats Present	Riffle and Run
Dominant Substrate	64-120 mm (small cobble)

River Between Two Mountains



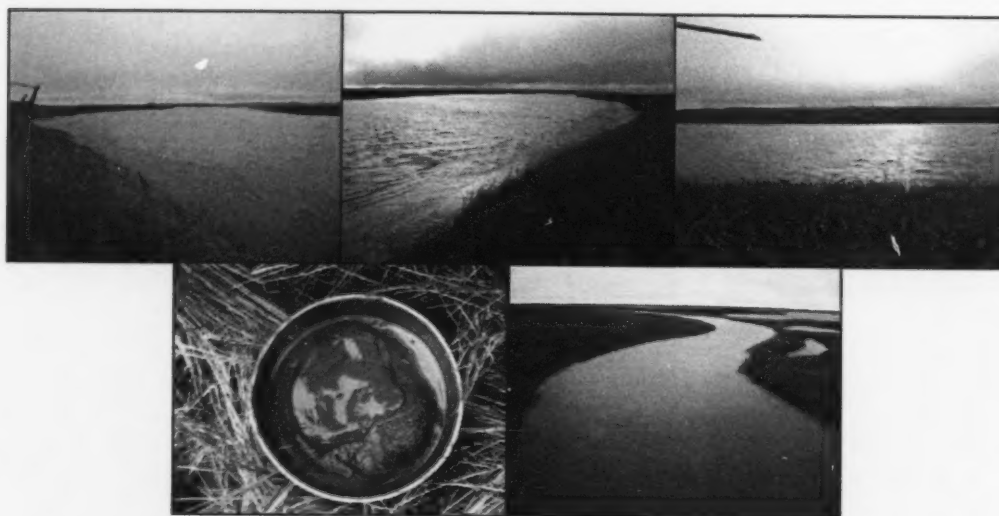
CABIN Site ID	RBTM419
Stream Name	River Btw 2 Mtns
Pipeline Crossing ID	RPR-419
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	62.94111
Longitude	-123.1603
Elevation (m)	152
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Sand or Gravel
Bankfull Width (m)	58.4
Wetted Width (m)	31.8
Habitats Present	14
Dominant Substrate	32-64 mm (coarse gravel)

RPR-001



CABIN Site ID	RPR001
Stream Name	Aklak Ch
Pipeline Crossing ID	RNT-002
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	69.36908
Longitude	-134.9238
Elevation (m)	0
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Alluvial Deposits
Sampling Year(s)	2006
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	119.6
Wetted Width (m)	95
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

RPR-005



CABIN Site ID	RPR005
Stream Name	RPR-005
Pipeline Crossing ID	RPR-005
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	69.35250
Longitude	-134.85417
Elevation (m)	0
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	55
Wetted Width (m)	53
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

RPR-008



CABIN Site ID	RPR008
Stream Name	RPR-008
Pipeline Crossing ID	RPR-008
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	69.20750
Longitude	-134.55167
Elevation (m)	10
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	21
Wetted Width (m)	21
Habitats Present	Run
Dominant Substrate	Organic cover

RPR-011



CABIN Site ID	RPR011
Stream Name	RPR-011
Pipeline Crossing ID	RPR-011
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	69.16389
Longitude	-134.37862
Elevation (m)	0
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Alluvial Deposits
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	133
Wetted Width (m)	132.5
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

RPR-012



CABIN Site ID	RPR012
Stream Name	RPR-012
Pipeline Crossing ID	RPR-012
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	69.15444
Longitude	-134.35638
Elevation (m)	0
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Alluvial Deposits
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	20.5
Wetted Width (m)	14
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

RPR-046



CABIN Site ID	RPR046
Stream Name	RPR-046
Pipeline Crossing ID	RPR-046
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	68.62666
Longitude	-133.60472
Elevation (m)	61
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	31
Wetted Width (m)	28.3
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

RPR-048



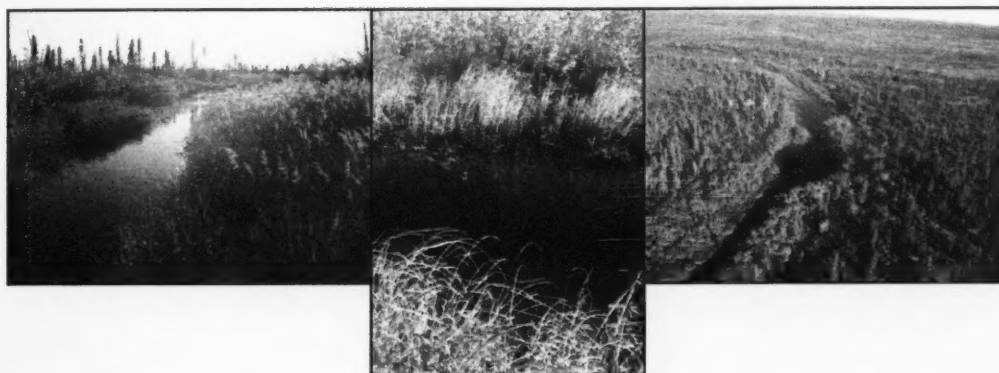
CABIN Site ID	RPR048
Stream Name	RPR-048
Pipeline Crossing ID	RPR-048
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	68.61555
Longitude	-133.56473
Elevation (m)	57
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	13
Wetted Width (m)	10.6
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

RPR-059



CABIN Site ID	RPR059
Stream Name	RPR-059
Pipeline Crossing ID	RPR-059
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	68.41695
Longitude	-133.24973
Elevation (m)	18
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	3.7
Wetted Width (m)	3.7
Habitats Present	Run and Pool
Dominant Substrate	<1 mm (clay, silt, fine sand)

RPR-065



CABIN Site ID	RPR065
Stream Name	RPR-065
Pipeline Crossing ID	RPR-065
Site Class	Ref-Pipe
Territorial Region	Gwich'in
Latitude	68.32222
Longitude	-133.16194
Elevation (m)	7
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Lacustrine Sand
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	25
Wetted Width (m)	21
Habitats Present	Run and Pool
Dominant Substrate	<1 mm (clay, silt, fine sand)

RPR-069



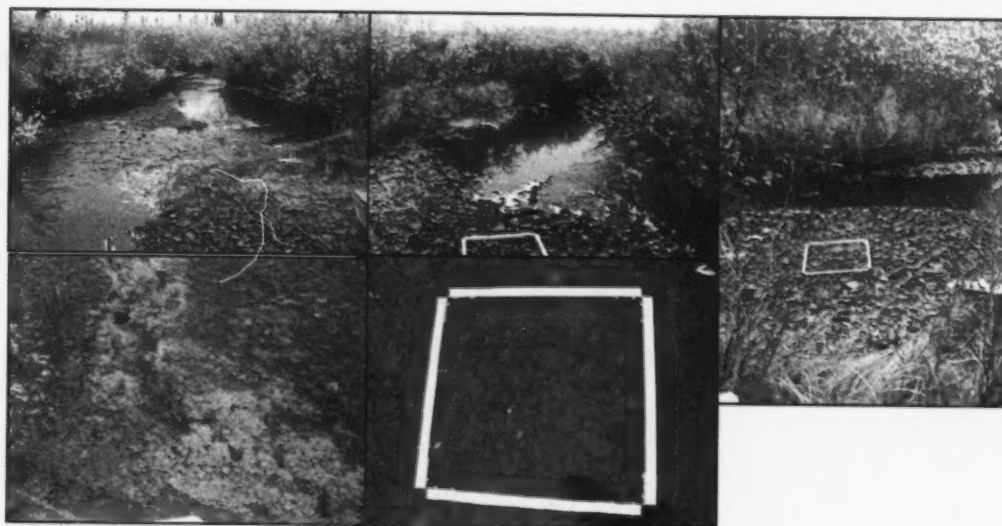
CABIN Site ID	RPR069
Stream Name	RPR-069
Pipeline Crossing ID	RPR-069
Site Class	Ref-Pipe
Territorial Region	Gwich'in
Latitude	68.19583
Longitude	-133.04388
Elevation (m)	8
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	5.5
Wetted Width (m)	4.2
Habitats Present	Riffle, Run, Pool
Dominant Substrate	<1 mm (clay, silt, fine sand)

RPR-070



CABIN Site ID	RPR070
Stream Name	RPR-070
Pipeline Crossing ID	RPR-070
Site Class	Ref-Pipe
Territorial Region	Gwich'in
Latitude	68.16389
Longitude	-132.98389
Elevation (m)	173
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	6
Wetted Width (m)	3
Habitats Present	Chute and Pool
Dominant Substrate	120-250 mm (large cobble)

RPR-075



CABIN Site ID	RPR075
Stream Name	RPR-075
Pipeline Crossing ID	RPR-075
Site Class	Ref-Pipe
Territorial Region	Gwich'in
Latitude	68.0939 (2005) / 68.0944 (2007)
Longitude	-132.83389
Elevation (m)	227
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2005 / 2007
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	5.5 (2005) / 5.5 (2007)
Wetted Width (m)	3 (2005) / 2.6 (2007)
Habitats Present	Riffle, Run, Pool
Dominant Substrate	11-32 mm (medium gravel)

RPR-099



CABIN Site ID	RPR099
Stream Name	RPR-099
Pipeline Crossing ID	RPR-099
Site Class	Ref-Pipe
Territorial Region	Gwich'in
Latitude	67.86916
Longitude	-132.04834
Elevation (m)	171
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	7.5
Wetted Width (m)	5.6
Habitats Present	Pool/Back eddy
Dominant Substrate	<1 mm (clay, silt, fine sand)

RPR-117



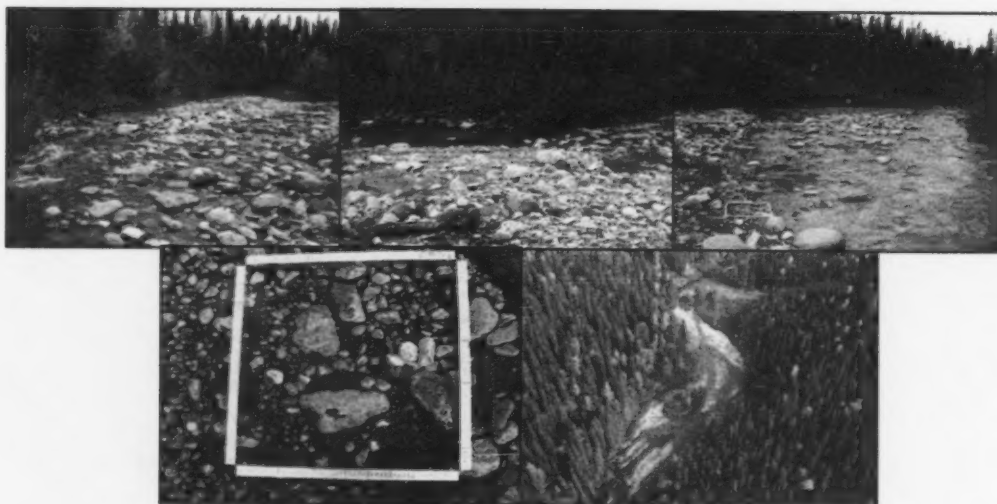
CABIN Site ID	RPR117
Stream Name	RPR-117
Pipeline Crossing ID	RPR-117
Site Class	Ref-Pipe
Territorial Region	Gwich'in
Latitude	67.66000
Longitude	-131.47194
Elevation (m)	244
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	1.8
Wetted Width (m)	1.5
Habitats Present	Chute and Pool
Dominant Substrate	11-32 mm (medium gravel)

RPR-271



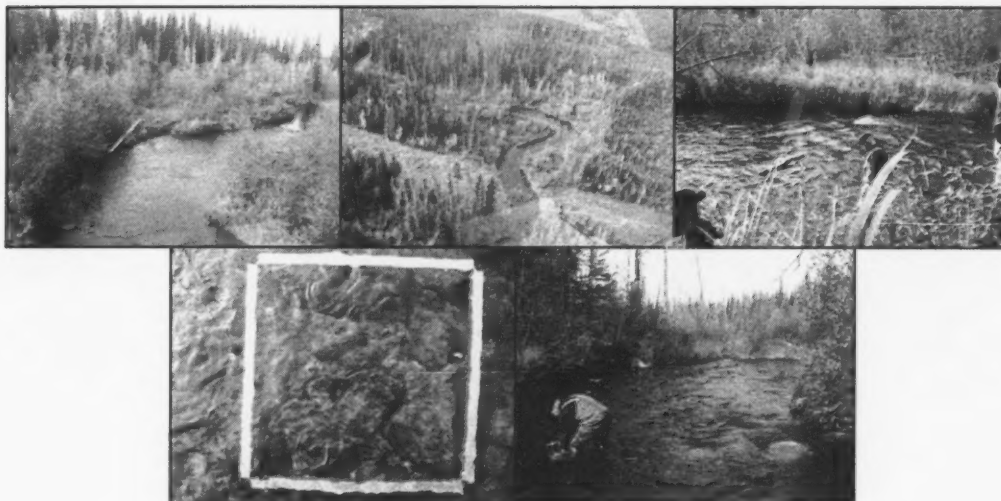
CABIN Site ID	RPR271
Stream Name	RPR-271
Pipeline Crossing ID	RPR-271
Site Class	Test
Territorial Region	Sahtu
Latitude	65.70889
Longitude	-127.88889
Elevation (m)	111
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Till Veneer
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	3
Wetted Width (m)	1.5
Habitats Present	Run, Pool, Debris Dam
Dominant Substrate	1-2 mm (medium and coarse sand)

RPR-403



CABIN Site ID	RPR403
Stream Name	RPR-403
Pipeline Crossing ID	RPR-403
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	63.26805
Longitude	-123.43056
Elevation (m)	177
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	12.1
Wetted Width (m)	5.6
Habitats Present	Riffle and Run
Dominant Substrate	32-64 mm (coarse gravel)

RPR-481



CABIN Site ID	RPR481
Stream Name	RPR-481
Pipeline Crossing ID	RPR-481
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	60.87972
Longitude	-120.51334
Elevation (m)	395
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Grasses
Bankfull Width (m)	11
Wetted Width (m)	11
Habitats Present	Run
Dominant Substrate	120-250 mm (large cobble)

Saline Creek



CABIN Site ID	SALIN358
Stream Name	Saline Ck
Pipeline Crossing ID	RPR-358
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	64.29134
Longitude	-124.50475
Elevation (m)	79
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Sand or Gravel
Bankfull Width (m)	22.3
Wetted Width (m)	11
Habitats Present	Riffle and Run
Dominant Substrate	11-32 mm (medium gravel)

Sandy Creek



CABIN Site ID	SAND1
Stream Name	Sandy Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Gwich'in
Latitude	67.84158
Longitude	-132.13048
Elevation (m)	153
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Glaciofluvial Complex
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	74
Wetted Width (m)	21.3
Habitats Present	Riffle and Run
Dominant Substrate	32-64 mm (coarse gravel)

Smith Creek



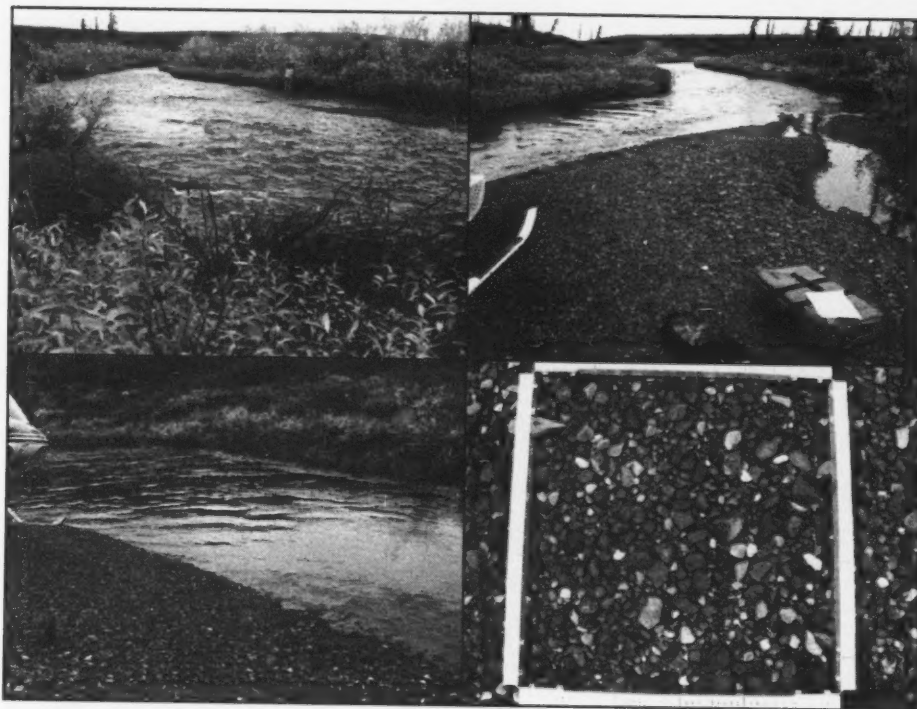
CABIN Site ID	SMIT410
Stream Name	Smith Ck
Pipeline Crossing ID	RPR-410
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	63.18278
Longitude	-123.30527
Elevation (m)	217
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	5.2
Wetted Width (m)	5.2
Habitats Present	Rapids, Riffle, Run, Pool
Dominant Substrate	>250 mm (boulder)

South Snafu Creek



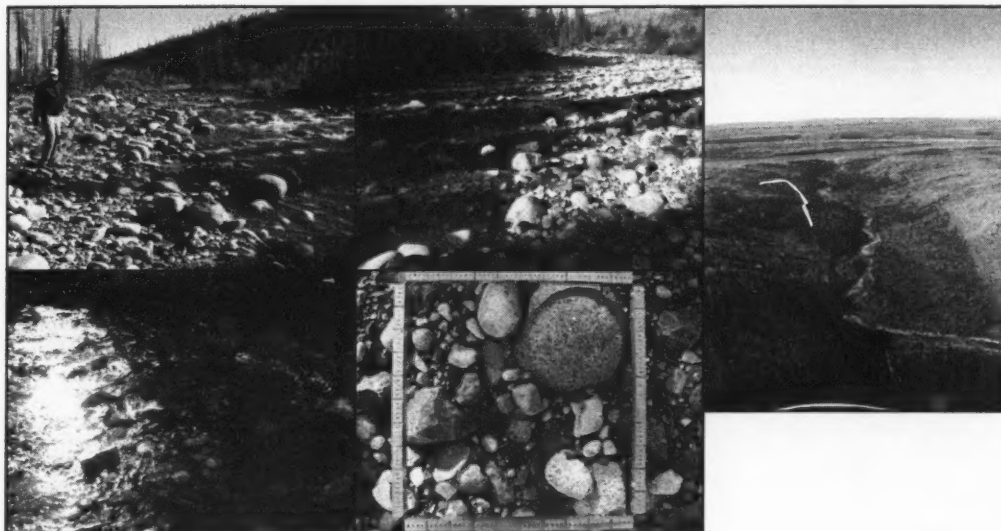
CABIN Site ID	SNAF261
Stream Name	South Snafu Ck
Pipeline Crossing ID	RPR-261
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.98695
Longitude	-128.31805
Elevation (m)	130
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	12
Wetted Width (m)	5
Habitats Present	Riffle, Run, Pool
Dominant Substrate	64-120 mm (small cobble)

Stanley Creek



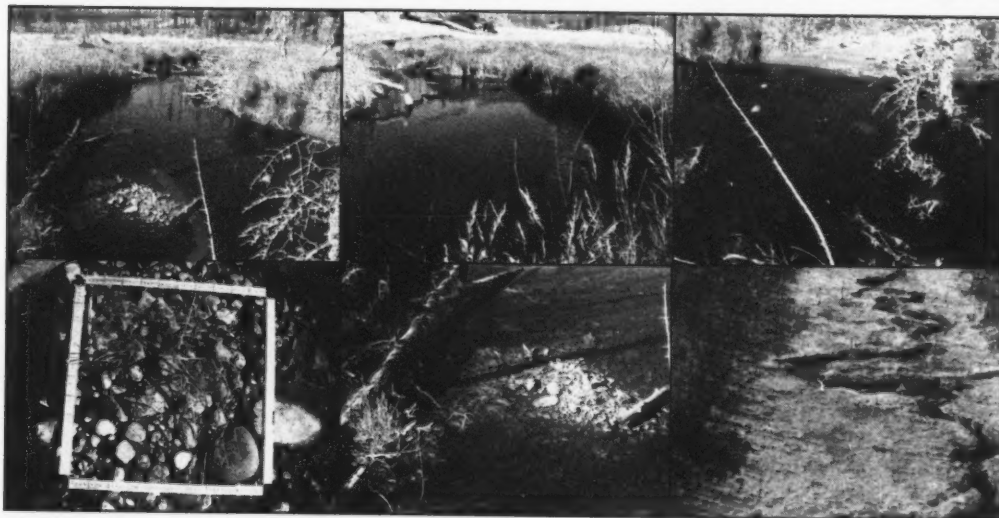
CABIN Site ID	STAN1
Stream Name	Stanley Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Inuvialuit
Latitude	68.70770
Longitude	-133.44783
Elevation (m)	52
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	13.9
Wetted Width (m)	10.7
Habitats Present	Riffle, Run, Pool
Dominant Substrate	32-64 mm (coarse gravel)

Steep Creek



CABIN Site ID	STEEP371
Stream Name	Steep Ck
Pipeline Crossing ID	RPR-371
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	64.18545
Longitude	-124.36405
Elevation (m)	129
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	21.3
Wetted Width (m)	11
Habitats Present	Rapids
Dominant Substrate	32-64 mm (coarse gravel)

Thinahtea Creek



CABIN Site ID	THINAB07
Stream Name	Thinahtea Ck
Pipeline Crossing ID	NWTL-07
Site Class	Ref-Pipe
Territorial Region	Alberta
Latitude	59.89703
Longitude	-119.96856
Elevation (m)	469
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Grasses
Bankfull Width (m)	8
Wetted Width (m)	7
Habitats Present	Pool/Back eddy
Dominant Substrate	11-32 mm (medium gravel)

Thunder River



CABIN Site ID	THUN141
Stream Name	Thunder R
Pipeline Crossing ID	RPR-141
Site Class	Ref-Pipe
Territorial Region	Gwich'in
Latitude	67.53500
Longitude	-130.84889
Elevation (m)	61
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	8
Wetted Width (m)	2.5
Habitats Present	Riffle, Run, Pool
Dominant Substrate	32-64 mm (coarse gravel)

Tieda River



CABIN Site ID	TIED221
Stream Name	Tieda R
Pipeline Crossing ID	RPR-221
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	66.66695
Longitude	-129.28889
Elevation (m)	58
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Veneer
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	18
Wetted Width (m)	12
Habitats Present	Riffle, Run, Pool
Dominant Substrate	32-64 mm (coarse gravel)

Travaillant River



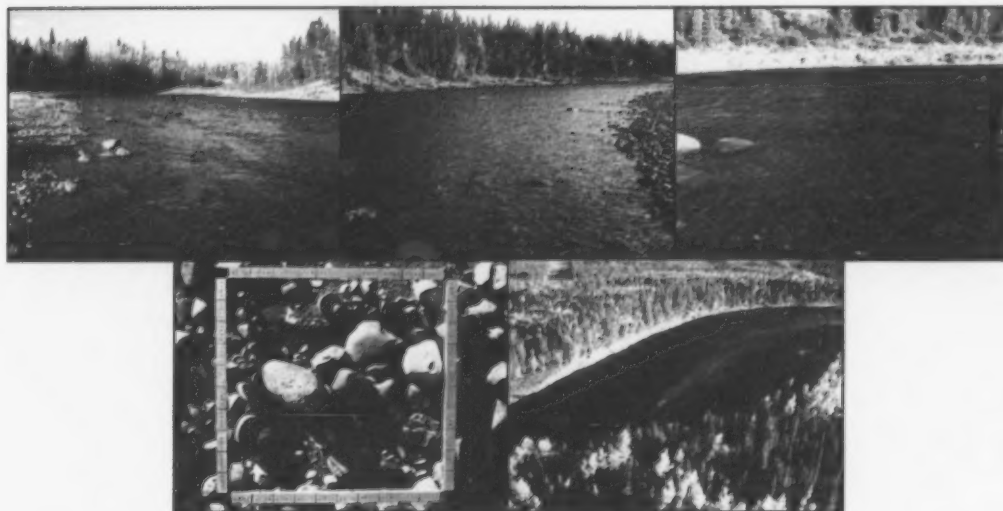
CABIN Site ID	TRAV097
Stream Name	Travaillant R
Pipeline Crossing ID	RPR-097
Site Class	Ref-Pipe
Territorial Region	Gwich'in
Latitude	67.91500
Longitude	-132.20111
Elevation (m)	188
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	12
Wetted Width (m)	8
Habitats Present	Riffle, Run, Pool
Dominant Substrate	64-120 mm (small cobble)

Travaillant River



CABIN Site ID	TRAV1
Stream Name	Travaillant R
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Gwich'in
Latitude	67.56575
Longitude	-131.43649
Elevation (m)	122
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	24
Wetted Width (m)	15
Habitats Present	Run
Dominant Substrate	<1 mm (clay, silt, fine sand)

Trout River



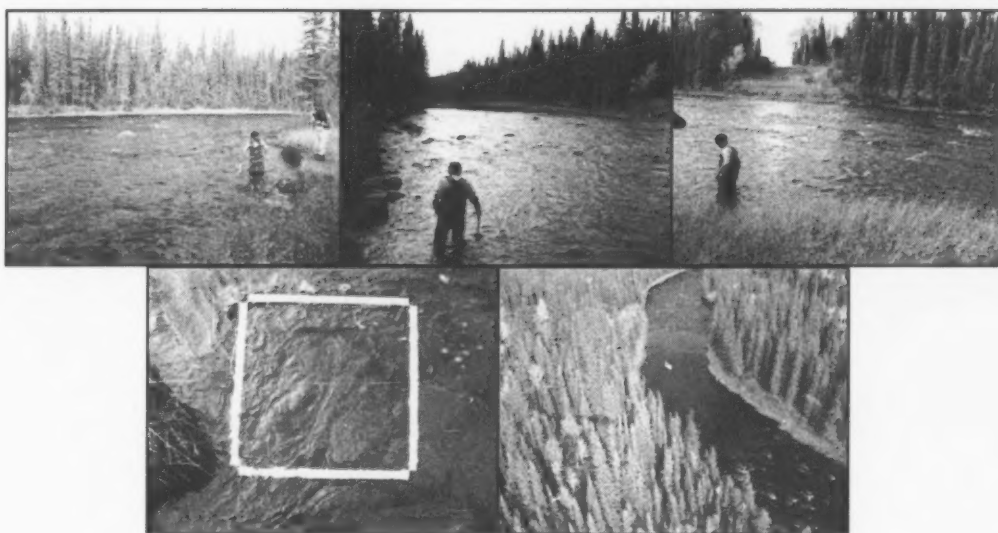
CABIN Site ID	TROU479
Stream Name	Trout R
Pipeline Crossing ID	RPR-479
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	60.97817
Longitude	-120.57195
Elevation (m)	342
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	55.6
Wetted Width (m)	49.6
Habitats Present	Run
Dominant Substrate	11-32 mm (medium gravel)

Trout Lake Rd Crossing 1



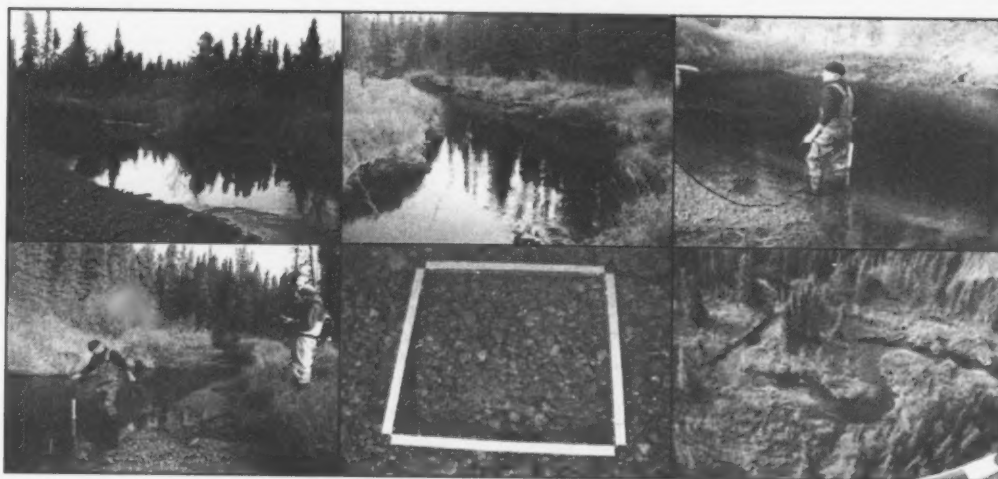
CABIN Site ID	TRRD1
Stream Name	Trout Lake Rd Xing1
Pipeline Crossing ID	n/a
Site Class	Test
Territorial Region	Dehcho
Latitude	61.00139
Longitude	-119.95528
Elevation (m)	295
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	26.4
Wetted Width (m)	17
Habitats Present	Riffle and Run
Dominant Substrate	64-120 mm (small cobble)

Trout Lake Rd Crossing 2



CABIN Site ID	TRRD2
Stream Name	Trout Lake Rd Xing2
Pipeline Crossing ID	n/a
Site Class	Test
Territorial Region	Dehcho
Latitude	60.96944
Longitude	-120.08945
Elevation (m)	296
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	33.9
Wetted Width (m)	33.9
Habitats Present	Riffle and Run
Dominant Substrate	>250 mm (boulder)

Trout Lake Rd Crossing 3



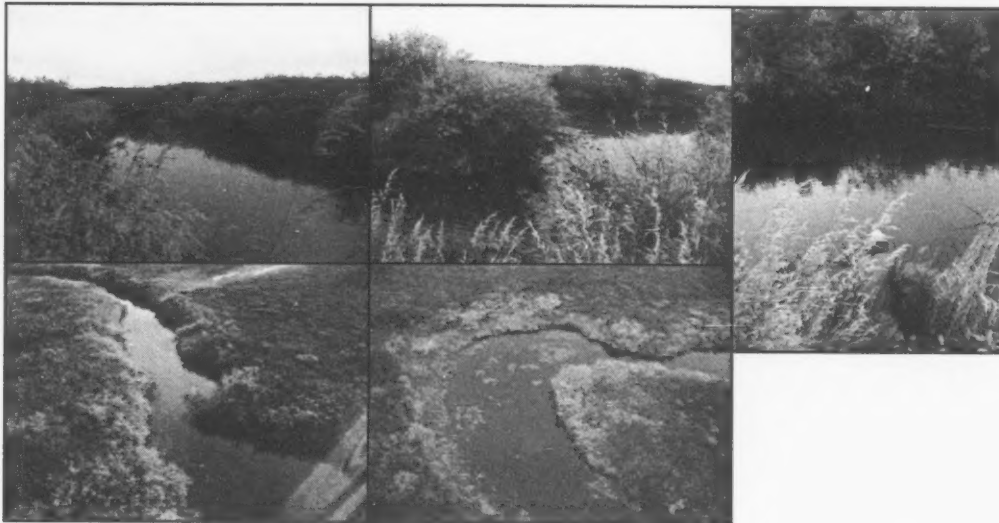
CABIN Site ID	TRD3
Stream Name	Trout Lake Rd Xing3
Pipeline Crossing ID	n/a
Site Class	Test
Territorial Region	Dehcho
Latitude	60.73361
Longitude	-120.64222
Elevation (m)	549
Permafrost Extent	Sporadic
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Grasses
Bankfull Width (m)	8.3
Wetted Width (m)	6.6
Habitats Present	Run and Pool
Dominant Substrate	11-32 mm (medium gravel)

Unnamed Creek 01



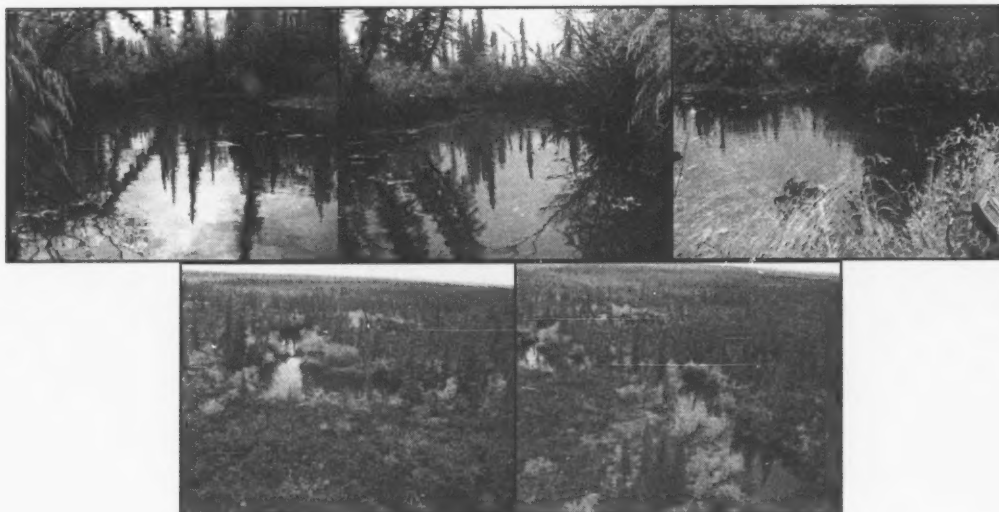
CABIN Site ID	UNCK01
Stream Name	Unnamed 01
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	68.77778
Longitude	-133.77028
Elevation (m)	47
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	16
Wetted Width (m)	11
Habitats Present	Run
Dominant Substrate	Organic cover

Unnamed Creek 02



CABIN Site ID	UNCK02
Stream Name	Unnamed 02
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Inuvialuit
Latitude	68.77778
Longitude	-133.77028
Elevation (m)	57
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Veneer
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	10
Wetted Width (m)	10
Habitats Present	Run and Pool
Dominant Substrate	<1 mm (clay, silt, fine sand)

Unnamed Creek 03



CABIN Site ID	UNCK03
Stream Name	Unnamed 03
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Gwich'in
Latitude	68.40028
Longitude	-133.30444
Elevation (m)	35
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Ponar
Dominant Riparian	Shrubs
Bankfull Width (m)	6.8
Wetted Width (m)	6.8
Habitats Present	Run and Pool
Dominant Substrate	<1 mm (clay, silt, fine sand)

Unnamed Creek 10



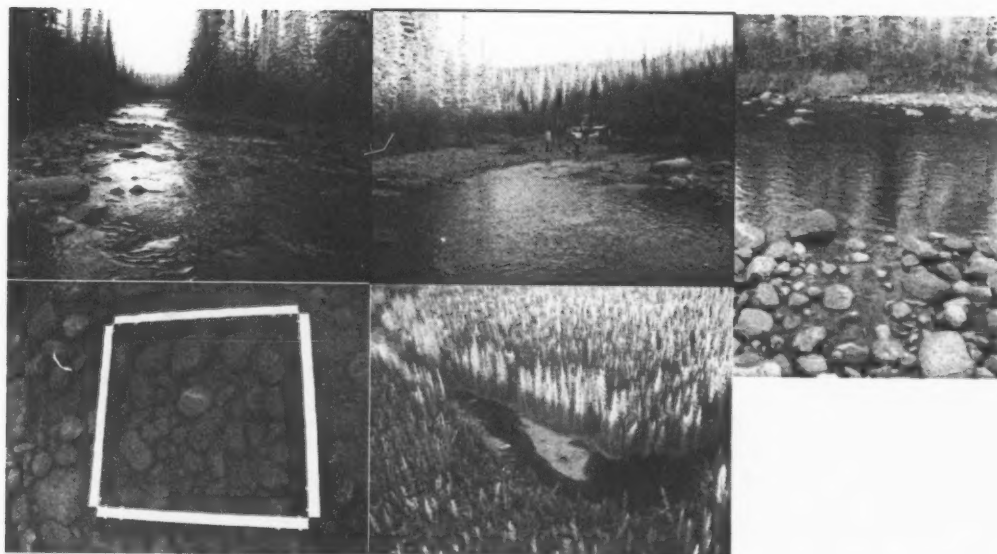
CABIN Site ID	UNCK10
Stream Name	Unnamed 10
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Inuvialuit
Latitude	67.38778
Longitude	-130.91333
Elevation (m)	56
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Glaciofluvial Complex
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Sand or Gravel
Bankfull Width (m)	25.7
Wetted Width (m)	12
Habitats Present	Riffle, Run, Pool
Dominant Substrate	32-64 mm (coarse gravel)

Unnamed Creek 16



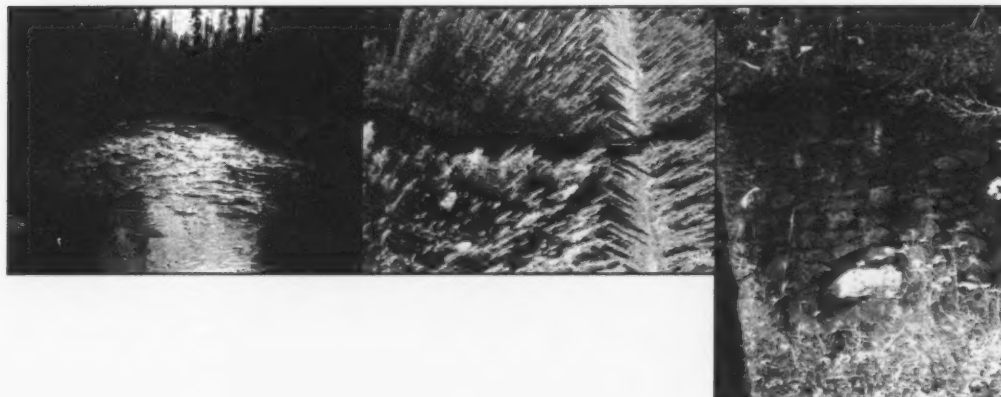
CABIN Site ID	UNCK16
Stream Name	Unnamed 16
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Gwich'in
Latitude	68.05167
Longitude	-133.41861
Elevation (m)	65
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	14.5
Wetted Width (m)	7
Habitats Present	Riffle, Run, Pool
Dominant Substrate	32-64 mm (coarse gravel)

Unnamed Creek 41



CABIN Site ID	UNCK41
Stream Name	Unnamed 41
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	62.60167
Longitude	-122.84167
Elevation (m)	208
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Till Blanket
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	21
Wetted Width (m)	12.3
Habitats Present	Rapids, Riffle, Run, Pool
Dominant Substrate	64-120 mm (small cobble)

Unnamed Creek 4A



CABIN Site ID	UNCK4A
Stream Name	Unnamed Creek 4A
Pipeline Crossing ID	n/a
Site Class	Test
Territorial Region	Dehcho
Latitude	62.18056
Longitude	-122.40250
Elevation (m)	156
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	7.6
Wetted Width (m)	7.2
Habitats Present	Riffle and Run
Dominant Substrate	32-64 mm (coarse gravel)

Unnamed Creek 4B



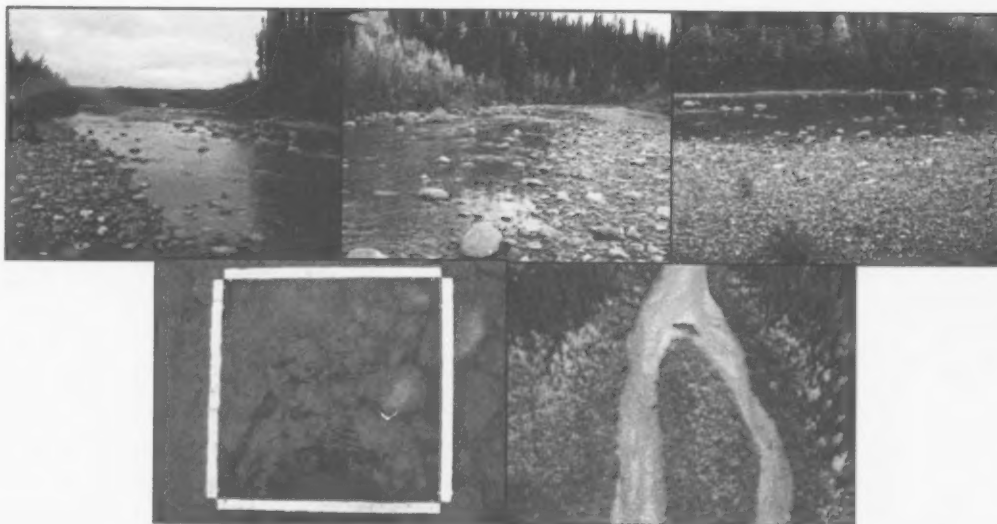
CABIN Site ID	UNCK4B
Stream Name	Unnamed 4B
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	62.18028
Longitude	-122.40222
Elevation (m)	156
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	10.3
Wetted Width (m)	9.4
Habitats Present	Riffle, Run, Pool
Dominant Substrate	64-120 mm (small cobble)

Vermillion Creek



CABIN Site ID	VERM323
Stream Name	Vermillion Ck
Pipeline Crossing ID	RPR-323
Site Class	Ref-Pipe
Territorial Region	Sahtu
Latitude	65.09000
Longitude	-126.14194
Elevation (m)	87
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Coarse-grained (Glacio) Lacustrine
Sampling Year(s)	2005
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	20
Wetted Width (m)	6
Habitats Present	Riffle, Run, Pool
Dominant Substrate	32-64 mm (coarse gravel)

White Sand Creek



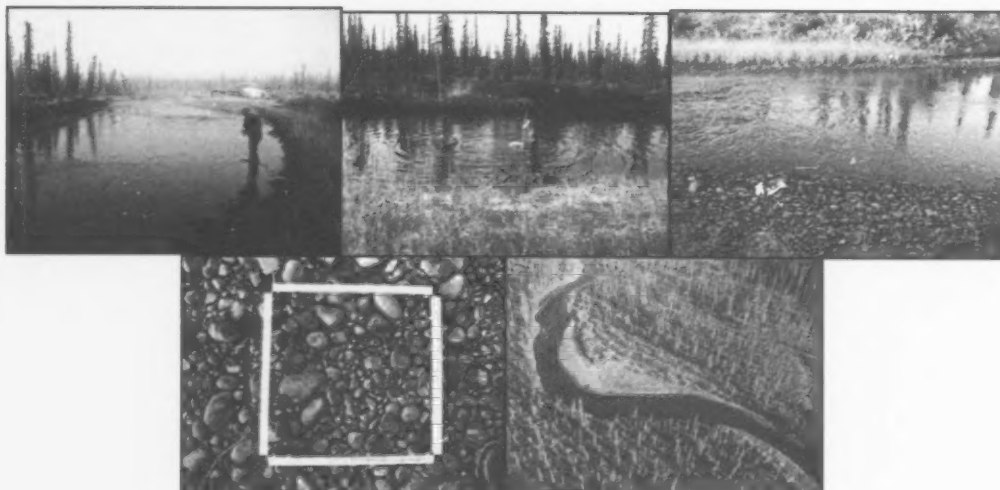
CABIN Site ID	WHSD388
Stream Name	White Sand Ck
Pipeline Crossing ID	RPR-388
Site Class	Test
Territorial Region	Dehcho
Latitude	63.55333
Longitude	-123.66278
Elevation (m)	153
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Fine-grained (Glacio) Lacustrine
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Sand or Gravel
Bankfull Width (m)	25.5
Wetted Width (m)	18.5
Habitats Present	Rapids, Riffle, Run, Pool
Dominant Substrate	32-64 mm (coarse gravel)

Willowlake River



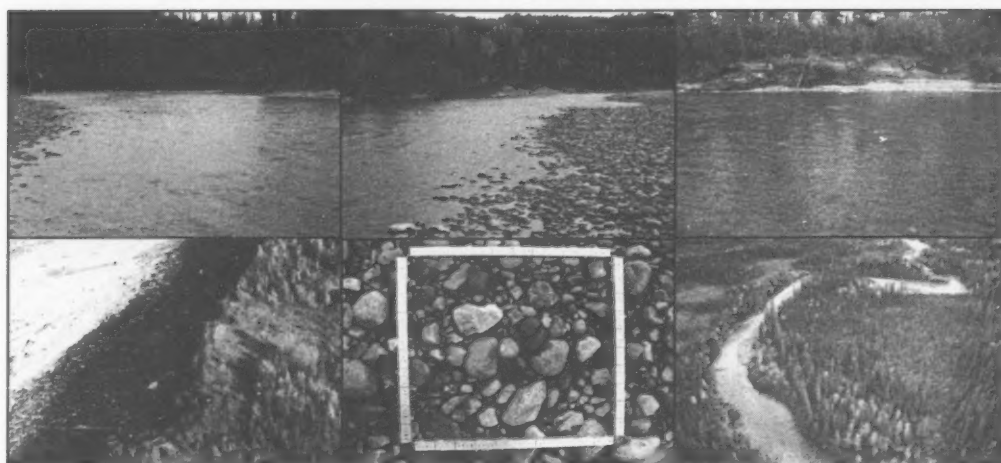
CABIN Site ID	WILL428
Stream Name	Willowlake R
Pipeline Crossing ID	RPR-428
Site Class	Ref-Pipe
Territorial Region	Dehcho
Latitude	62.71139
Longitude	-123.08222
Elevation (m)	136
Permafrost Extent	Discontinuous
Ground Ice Content	Low
Surficial Material	Alluvial Deposits
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Sand or Gravel
Bankfull Width (m)	168
Wetted Width (m)	141
Habitats Present	Run
Dominant Substrate	32-64 mm (coarse gravel)

Wood Bridge Creek



CABIN Site ID	WOOD1
Stream Name	Wood Bridge Ck
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Gwich'in
Latitude	67.85139
Longitude	-132.16167
Elevation (m)	172
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Glaciofluvial Complex
Sampling Year(s)	2007
Sampling Device	Kicknet
Dominant Riparian	Grasses
Bankfull Width (m)	13.8
Wetted Width (m)	10.5
Habitats Present	Riffle, Run, Pool
Dominant Substrate	11-32 mm (medium gravel)

Wrigley River



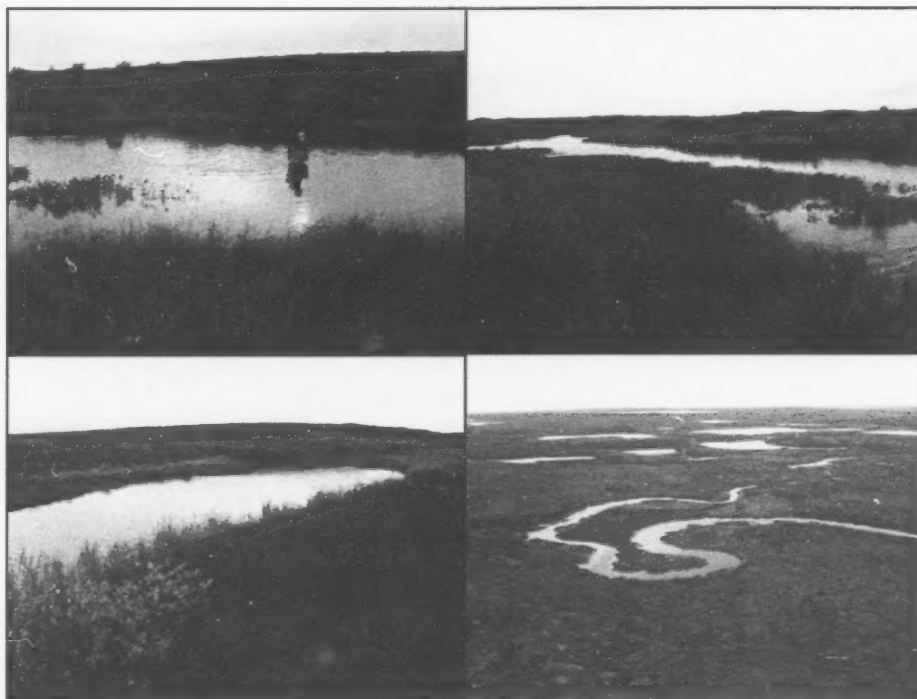
CABIN Site ID	WRIG1
Stream Name	Wrigley R
Pipeline Crossing ID	n/a
Site Class	Ref-Future
Territorial Region	Dehcho
Latitude	63.23203
Longitude	-123.64206
Elevation (m)	107
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Glaciofluvial Plain
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Coniferous trees
Bankfull Width (m)	52
Wetted Width (m)	29.3
Habitats Present	Run
Dominant Substrate	11-32 mm (medium gravel)

Yaya River



CABIN Site ID	YAYA007
Stream Name	Yaya R
Pipeline Crossing ID	RPR-007
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	69.22736
Longitude	-134.58006
Elevation (m)	2
Permafrost Extent	Discontinuous
Ground Ice Content	Medium
Surficial Material	Till Blanket
Sampling Year(s)	2006
Sampling Device	Kicknet
Dominant Riparian	Shrubs
Bankfull Width (m)	64
Wetted Width (m)	2
Habitats Present	Run
Dominant Substrate	1-2 mm (medium and coarse sand)

Zed Creek



CABIN Site ID	ZED001
Stream Name	Zed Ck
Pipeline Crossing ID	RPL-001
Site Class	Ref-Pipe
Territorial Region	Inuvialuit
Latitude	68.95014
Longitude	-133.53928
Elevation (m)	29
Permafrost Extent	Continuous
Ground Ice Content	High
Surficial Material	Glaciofluvial Complex
Sampling Year(s)	2006
Sampling Device	Ponar
Dominant Riparian	Grasses
Bankfull Width (m)	25
Wetted Width (m)	21
Habitats Present	Run and Pool
Dominant Substrate	Organic cover

**Bioassessment of Streams Along the
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Using the Reference Condition Approach:
Biological, Habitat, Landscape and Climate Data**

L.L. Rempel and
G.J. Gill¹

Fisheries and Oceans Canada
Central and Arctic Region
Freshwater Institute
Winnipeg, MB
R3T 2N6

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